OPW
FUEL MANAGEMENT SYSTEMS

Phoenix® Plus

For K2500 & System2

User Manual

Software Version 12.07

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OPW Fuel Management Systems -
System and Replacement Parts Warranty Statement

Effective September 1, 2002

System and Replacement Parts Warranty

OPW Fuel Management Systems warrants that all OPW Tank Gauge and Petro Vend Fuel Control systems supplied by OPW Fuel Management Systems to the Original Purchaser will be free from defects in material and/or workmanship under normal use and service for a period of 12 months from the date of installation or 15 months from the date of shipment. Additionally, OPW Fuel Management Systems warrants that all upgrades and replacement parts (new and remanufactured) supplied by OPW Fuel Management Systems will be free from defects in material and workmanship under normal use and service for a period of 90 days from the date of installation or for the remainder of the system's original warranty, whichever is greater, as set forth in the first sentence of this statement. The foregoing warranties will not extend to goods subjected to misuse, neglect, accident, or improper installation or maintenance or which have been altered or repaired by anyone other than OPW Fuel Management Systems or its authorized representative.

The buyer's acceptance of delivery of the goods constitutes acceptance of the foregoing warranties and remedies, and all conditions and limitations thereof.

If a claim is made within the warranted time period that any equipment and/or remanufactured part is defective in material or workmanship under normal use and service, such equipment and/or remanufactured part shall be returned to OPW Fuel Management Systems, freight prepaid. If such equipment or remanufactured part is found by OPW Fuel Management Systems in its sole judgment, to be defective in material or workmanship under normal use and service, OPW Fuel Management Systems, shall, at its sole option, repair or replace such equipment and/or remanufactured part (excluding, in all instances, fuses, ink cartridges, batteries, other consumable items, etc.)

The warranties, as set forth above, are made expressly in lieu of all other warranties, either expressed or implied, including, without limitation, warranties of merchantability and fitness for any particular purpose and of all other obligations or liabilities on OPW Fuel Management Systems part. Further, OPW Fuel Management Systems neither assumes, nor authorizes any other person to assume for it, any other liability in connection with the sale of the systems, or any new/replacement part that has been subject to any damage from any act of nature or any *force majeure*.

The term "Original Purchaser" as used in these warranties shall be deemed to mean the authorized OPW Fuel Management Systems distributor to which the system or any new/replacement part was originally sold. These warranties may be assigned by the original purchaser to any of its customers who purchase any OPW Fuel Management Systems systems or new/replacement parts.

The sole liability of OPW Fuel Management Systems, for any breach of warranty, shall be as set forth above. OPW Fuel Management Systems does not warrant against damage caused by accident, abuse, faulty or improper installation or operation. In no event shall manufacturer's liability on any claim for damages arising out of the manufacture, sale, delivery or use of the goods exceed the original purchase price of the goods. In no event shall OPW Fuel Management Systems be liable for any direct, indirect, incidental or consequential damage or loss of product.

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How To Use This Manual

This manual provides the information necessary for installing and operating the ***Phoenix Plus*** software for the Petro Vend System2® or K2500® card system.

Since ***Phoenix Plus*** can add, change and delete the card record information in your system's memory, you should be very familiar with what card options are currently active in your System2 or K2500. See the system's Operator's Manual for details. This manual consists of the following sections:

1. **Software Installation** *(See Page 3).* Explains system requirements and how to install the ***Phoenix Plus*** program onto the hard drive of your PC.

2. **Menu Overview** *(See Page 5).* Briefly covers each of the ***Phoenix Plus*** menus and sub-menus. Each menu is explained in greater depth in its own section of this manual.

3. **Introduction** *(See Page 7).* Provides a functional overview of the ***Phoenix Plus*** software, a list of software features and the keyboard conventions used in ***Phoenix Plus***.

4. **Initial Setup** *(See Page 9).* Explains all required setup parameters to get ***Phoenix Plus*** ready for operation. Also discusses optional setup conditions to customize your program.

5. **Main Menu** *(See Page 17).* Discusses the Account Maintenance, Transaction Capture, Immediate Update and Timed Card options.

6. **Reports Menu** *(See Page 27).* Explains ways to set up and generate reports, including Masterfile Listings, Sales History and Activity Reports.

7. **Manual Entry Menu** *(See Page 39).* Describes how to add fueling transactions that occurred outside the card system network, how to edit transactions, or how to correct errors in polled transactions.

8. **Period End Menu** *(See Page 45).* The Period End functions are typically used at the end of an accounting period (as in the end of month). Period End functions create history "buckets" and allow you to purge transactions.

9 **Utilities Menu** *(See Page 49).* The ***Phoenix Plus*** utilities include database housekeeping functions, system backup features, terminal emulation and data export. A calculator and calendar are included, along with the access to the DOS shell.

Appendices A, B and C. Appendix A describes the AUTOPOLL script language, which captures and updates card records and backs up or restores records. Appendix A is simply reference material. Most users do not need to understand the details of Autopoll, since

Phoenix Plus creates scripts automatically. **Appendix B** is a pictorial description of polling, while **Appendix C** describes odometer "tracking".

For best results, read Section 1, 2 and 3 before proceeding with the start-up process in Section 4. After completing the *Initial Setup* procedure in Section 4, you'll be ready to set up your accounts and cards using the ACCOUNT MAINTENANCE menu, which is covered in Section 5.

Having completed these steps, your ***Phoenix Plus*** system should be ready for use. You can then review the other sections of the manual as required.

NOTE: *Due to production deficiencies, keywords (such as "Browse," "Insert," "Edit") in some screen illustrations in this manual are missing the first letter. You will see the full word in the actual software screen.*

1.0 Software Installation

1.1 SYSTEM REQUIREMENTS

Phoenix Plus will *NOT* operate over a network! The program can only be run on a standalone PC. To run ***Phoenix Plus***, you must have the following hardware and software:

- A 386 (or higher) processor in your computer
- 4 Mb of RAM
- 590 kB of free CONVENTIONAL memory (see "IMPORTANT" below)
- 10 to 20 Mb of hard disk space
- MS-DOS 5.0 or higher
- Your MS-DOS CONFIG.SYS file must contain the following two lines: **`FILES=70`** and **`BUFFERS=10.`**
- An available COM1 or COM2 port for communicating with the System2 or K2500.

IMPORTANT

Some TSR (Terminate and Stay Resident) programs cause erratic operation in Phoenix Plus. If you experience problems with Phoenix Plus, exit any running TSR programs on your computer. If in doubt that a program is a TSR program, exit it, and see if the Phoenix Plus problem is corrected.

To see how much conventional memory your PC has, type **mem** at the C:> prompt. Check the "Largest executable program size"; if it is less than 590K, you will need to free up conventional memory. If you have DOS 6.0 or higher, use the MEMMAKER function to do this. Otherwise, refer to your DOS manual.

Do *NOT* run the following programs while using ***Phoenix Plus***:

- Doublespace disk compression utility (DBLSPACE.EXE)
- Smartdrive “RAM disk” utility (SMARTDRV.EXE)

1.2 INSTALLATION PROCEDURE

1. Go to your computer's **C:** prompt.

2. Insert the first ***Phoenix Plus*** disk into the floppy drive. Change the drive prompt by typing **b:** or **a:** and then **[ENTER]**. Type **INSTALL [ENTER]** at the floppy prompt.

3. Follow the directions you see on the screens. You will be asked for directory and subdirectory names; in most cases it is OK to answer all prompts with the system default choice by pressing the **[ENTER]** key. The program will create all necessary directories and subdirectories.

4. After directory creation, you will be prompted to begin copying the software. Press **[Y]**, or **[N]** to cancel the operation. Insert floppies in order, as requested by ***Phoenix Plus***, pressing **[ENTER]** after inserting each. *Installation takes about 15 minutes.*

5. When you see ALL FILES TRANSFERRED, press any key to have ***Phoenix Plus*** check your PC's CONFIG.SYS file altering it if required. The original CONFIG.SYS file is saved with a different file suffix. ***At this point, Phoenix Plus*** will add a command line to your PC's AUTOEXEC.BAT file. The original file is saved as **AUTOEXEC.OLD**.

6. Type **PHOENIX** at the **C:>** prompt to start the program. ***Phoenix Plus*** displays in color. If you are using a monochrome monitor, use the System Options choice in the Setup menu (Page 10) to change the software monitor configuration.

ATTENTION "BANK NETWORK" SOFTWARE USERS

Phoenix Plus works with K2500/System2 card systems equipped with standard card record *or* ChipKey Read/Write Odometer Reasonability software. If you are using some type of bank network software, there may be compatibility problems.

Please contact Petro Vend Technical Service department if you have ANY doubts about Phoenix Plus working properly with your setup.

2.0 Menu Overview

2.1 MAIN MENU *(See Page 17)*

(1) Account Maintenance Menu
- (1) Address and Constant Data
- (2) Card 1 (Driver) Maintenance
- (3) Card 2 (Vehicle) Maintenance
- (4) Account Sales History Inquiry
- (5) Transaction Inquiry
- (6) Delete Account
- (7) Exit

(2) Transaction Capture Menu
- (1) Transaction Capture/Card Update
- (2) Transaction Edit
- (3) Transaction Error Reports
- (4) Transaction Log Lists
- (5) Clear Transaction Log

(3) Immediate Card Update Only

(4) Timed Card System Capture

2.2 REPORTS MENU *(see Page 27)*

(1) Account Masterfile Listing
(2) Card 1 Masterfile Listing
(3) Card 2 Masterfile Listing
(4) Site Sales History
(5) Product Sales History
(6) Account Sales History
(7) Transaction Report
(8) Activity Report
(9) Pump Reconciliation Report
(10) Warning Mileage Exception Report

2.3 MANUAL ENTRY MENU *(See Page 39)*

(1) Manual Transaction Data Entry
(2) Transaction Edit List
(3) Transaction Edit
(4) Edit, Delete Existing Transactions

2.4 PERIOD END MENU *(See Page 45)*

(1) Period End Process
(2) Move Transactions to History
(3) Purge History Transactions

2.5 UTILITIES MENU *(See Page 49)*

(1) Database Utilities
- (1) Pack Database Files
- (2) Re-Index Database Files
- (3) Purge Selected Files

(2) Card System Utilities
- (1) Backup Site Configuration
- (2) Restore Site Configuration
- (3) Backup Card Records
- (4) Restore Card Records
- (5) Import Cards
- (6) Resend Phoenix Card Update

(3) Terminal Emulation for a Site
(4) Data Export
(5) Calculator
(6) Calendar/Diary
(7) DOS Shell
(8) Edit Text File
(9) View Text File

2.6 SETUP MENU *(see Page 9)*

(1) System Options
(2) Site Code Maintenance
(3) Product Code Maintenance
(4) Card Status Code Maintenance
(5) Pump Restriction Maintenance
(6) Quantity Restriction Maintenance
(7) Reasonability Code Maintenance
(8) Utility Driver Card Maintenance
(9) Printer Interface Selection
(A) Printer Port Selection
(B) Card 1 Edit Defaults
(C) Card 2 Edit Default
(D) ChipKey

EXIT

Motes:

3.0 Introduction

Phoenix Plus, a powerful data management and communications software package, is works with the Petro Vend System2 and K2500 Automated Fuel Management systems.

3.1 FEATURES

- **Extensive Reporting Abilities**

  Files are in DBF format, so you can use either the ***Phoenix Plus*** built-in report functions or the report writer function of most popular database programs such as dBase®, FoxPro®, Lotus 1-2-3® or others.

- **Multiple Site Autopolling**

  Phoenix Plus will automatically dial out to up to 999 sites to update internal ***Phoenix Plus*** card files and capture transactions. Autopolling can be done either on-demand or at scheduled times.

- **Centralized Card Management**

  Any additions, deletions, or modifications to card records only need to be made once offline, then sent during Autopolling to update all card systems.

- **Backup And Restore Feature**

  Lets you save, and later download, configuration and other site data for all your System2 or K2500 card systems. Ideal for quick recovery from system memory corruption or other accidental data loss.

- **Simple Operation**

  Phoenix Plus simplifies operations with such features as "browse" and "search" functions, and menu-driven pull-down or pop-up windows.

- **Multiple Usage Statistics**

  Using the captured transactions, ***Phoenix Plus*** creates a variety of usage statistics by card, account, site and product. An extensive list of reporting options are provided to help monitor fuel use.

- **Manual Entry**

  Fueling transactions from outside sources can be added to your transaction database via the Manual Entry feature of ***Phoenix Plus***. In addition, previously captured transactions can be archived in a history file for historical reporting.

3.2 KEYBOARD CONVENTIONS

Phoenix Plus software uses the keys present on most computer keyboards to perform the following functions. Many keys perform the same functions as a standard word processor program.

Menu Activation and Movement - Press **[ALT]** and the (typically) first letter for the function or submenu; for example, pressing **[ALT]** and **[R]** selects the Reports menu.

Currently Highlighted Menu Item - Use the "arrow keys" (UP, DOWN. LEFT and RIGHT) to move the highlight around the current menu.

Edit Current Field - The "arrow keys" work during editing to move you from field to field in a current screen.

The following specific keys work as described:

[TAB] Moves highlight to the next field

[CTRL][ENTER] Pressing **[CTRL]** and **[ENTER]** simultaneously moves the cursor to the bottom of the current screen.

[HOME] In Browse mode, returns the cursor to the *first* page.

[END] In Browse mode, moves the cursor to the *last* page.

[PAGE UP] In Browse mode, returns the cursor to the first listing on the previous page.

[PAGE DOWN] In Browse mode, moves the cursor to the first listing on the next page.

[INSERT] Toggled function. If INSERT ON, a type-over method of data entry is used: new characters erase old characters as they are entered. If INSERT OFF, entered characters push existing characters aside.

[DELETE] In Data Entry mode, deletes one character at the current cursor position.

[BACKSPACE] In Data Entry mode, moves cursor back, deleting one character at a time.

[ESC] Exits current screen and returns you to the previous screen or menu selection.

4.0 Initial Setup

Before you can use ***Phoenix Plus*** to process your System2 or K2500 fueling data, you must complete the initial setup process described in this section. The setup procedure consists of two parts: (1) required (Section 4.1) and (2) optional (Section 4.2 on page 15). *Section 4.1 must be completed before you can use* ***Phoenix Plus***.

IMPORTANT

During setup, you create data files which affect the way Phoenix Plus performs. These files DO NOT affect your card systems: ***Phoenix Plus*** parameters "mirror" your card system parameters, but do NOT change them. ***Phoenix Plus*** parameters CANNOT be downloaded to your card systems.

To begin setup, select the Setup menu to display the Setup Menu pulldown (Figure 1).

```
1. SYSTEM OPTIONS
-----------------------------------
2. SITE CODE MAINTENANCE
3. PRODUCT CODE MAINTENANCE
-----------------------------------
4. CARD STATUS CODE MAINTENANCE
5. PUMP RESTRICTION MAINTENANCE
6. QUANTITY RESTRICTION MAINTENANCE
7. REASONABILITY CODE MAINTENANCE
-----------------------------------
8. UTILITY DRIVER CARD MAINTENANCE
9. PRINTER INTERFACE SELECTION
A. PRINTER PORT SELECTION
-----------------------------------
B. CARD1 EDIT DEFAULTS
C. CARD2 EDIT DEFAULTS
D. CHIPKEY CODES MAINTENANCE
```

Figure 1 - Setup Menu Pulldown

Next, proceed through each of the items described in the following several pages.

4.1 REQUIRED SETUP PARAMETERS

4.1.1 System Options

Choose **(1) System Options** from the Setup menu. System Options let you define various field and setup parameters used by ***Phoenix Plus*** for such things as monitor color/monochrome, autopoll time, and currency type, etc. The System Options screen also shows the version of the software.

1. Select <EDIT>. Set the current processing month (01-12), year and the company name that will appear on the reports.

2. Customize any of the user-defined field headlines (4 for Accounts, 2 for Card records - used in both Card 1 and Card 2 records). *NOTE: These fields are NOT used in any Transaction Report activities.*

3. Select titles for Card 1 and 2 records (Driver, Vehicle or Employee # and Truck #).

4. Select a Misc. Keyboard Entry Title (Misc. Entry or Job # or Work Order #).

5. Set Autopoll time for automatic polling (four digits, 24-hour time format). When TIMED CARD SYSTEM POLLING is selected from the main menu, this is the time that polling will begin.

6. Select <NEXT SCREEN> and press **[ENTER]**. Select Currency, Fuel Symbol, Unit of Measure, Distance, English/Metric, Edit Option, Display Option or Enable Read/Write ChipKey using **[TAB]** to highlight the option. Press **[ENTER]** to select.

   NOTE: *After changing the Display Option, the Phoenix Plus program automatically exits. Type* **PHOENIX** *and press* **[ENTER]** *to restart.*

7. *Select* <OK> and press **[ENTER]** to save your changes to this screen. Select <CANCEL> or press **[ESC]** to clear changes, return to the screen and make corrections. Press **[ESC]** again to return to the Setup menu.

NOTE

Codes described in the next few sections - Site, Product, Card Status, Pump Restriction, Quantity Restriction and Reasonability - must match the codes in your SYSTEM2 or K2500 card systems. **This only applies if you are using these features in your card system.**

Phoenix Plus will default to the SYSTEM2 or K2500 default codes; changes to ***Phoenix Plus*** codes will NOT automatically go to the card systems. You must enter these changes manually into your card systems.

4.1.2 Site Code Maintenance

Choose **(2) Site Code Maintenance** from the Setup menu. Each card system location must be assigned a Site Code, a three-digit number from **000** to **999**.

1. Select <INSERT> to add a new site. Enter a three-digit site code for this site.

2. Enter the site name, address, phone numbers, communications parameters and system passwords. A short name can be added for report purposes. The Product Sales information is updated automatically; no user input is required here, unless you want to initialize the information to match your existing records.

3. Select <OK> and press **[ENTER]** to save this record.

You can now choose <INSERT> to enter a new site code, <BROWSE> to select an existing site, <PRINT> to print your existing site information, or <CANCEL> to return to the Setup menu.

After exiting the system, new script files are automatically generated. These files are required by Autopoll to communicate with each card system.

4.1.3 Product Code Maintenance

Choose **(3) Product Code Maintenance** from the Setup menu. A Product Code must be created for each product dispensed through your System2 or K2500. Default codes are listed in your card system *Operator's Guide*.

1. Select <BROWSE> to review existing product codes. To edit an existing code, highlight the code, press **[ENTER]**, then select <EDIT>. See the note on Page 11.

2. Enter the product description corresponding to the two-digit code at your sites. The "Description" is used for reports, the "Browse Description" is used in browse windows and the "Three-Character Description" is used in reports where the longer description would not fit.

3. Select <OK> to accept the changes.

Now choose <INSERT> to enter a new product code, <BROWSE> to select an existing code, <PRINT> to print your existing product information, or <CANCEL> to go to the Setup menu. For more info on product codes, see *Restrictions* in the *Operator's Guide* for your card system.

4.1.4 Card Status Code Maintenance

Choose **(4) Card Status Code Maintenance** from the Setup menu. A Card Status Code defines the status of each fueling card as VALID (allowed to get fuel) or INVALID (not allowed to get fuel). Default codes are listed in your card system *Operator's Guide.*

Status letter **A** means the card is active/valid. Any other code letter means the card is locked out. Set up as many status codes as you wish.

1. Select <BROWSE> to review existing status codes. To edit an existing code, highlight your selection and press **[ENTER]** and then select <EDIT>. See the note on Page 11.

2. Enter a description. The "Description" is used for reports, the "Browse Description" is used in browse windows and the "Three-Character Description" is used in reports where the longer description would not fit.

3. Select <OK> to accept the changes.

You can now choose <INSERT> to enter a new status code, <BROWSE> to select an existing code, <PRINT> to print your existing code information, or <CANCEL> to go to the Setup menu. For more information on status, see the *Restrictions* section in the *Operator's Guide* for your card system.

4.1.5 Pump Restriction Maintenance

Choose **(5) Pump Restriction Maintenance** from the Setup menu. A Pump Restriction Code is a two-digit number (**00** to **99**) used to limit the products that a card can use. Default codes are listed in your card system *Operator's Guide.*

1. Select <BROWSE> to review existing restriction codes. To edit an existing code, highlight your selection and press **[ENTER]** and then select <EDIT>. See Page 11.

2. Enter a description. The "Description" is used for reports, the "Browse Description" is used in browse windows and the "Three-Character Description" is used in reports where the longer description will not fit.

3. Select <OK> to accept the changes.

You can now choose <INSERT> to enter a new code, <BROWSE> to select an existing code, <PRINT> to print your existing code information, or <CANCEL> to go to the Setup menu.

For more information on Pump Restrictions, see the *Restrictions* section in the *Operator's Guide* for your card system.

4.1.6 Quantity Restriction Maintenance

Choose **(6) Quantity Restriction Maintenance** from the Setup menu. A Quantity Restriction code limits the quantity of a particular product that a card can access per transaction. Default codes are listed in your card system *Operator's Guide.*

1. Select <BROWSE> to review existing restriction codes. To edit an existing code, highlight your selection and press **[ENTER]** and then select <EDIT>. See the note on Page 11.

   NOTE: *System2 card systems permit restriction by either price or volume.*

2. Enter a description. The "Description" is used for reports, the "Browse Description" is used in browse windows and the "Three-Character Description" is used in reports where the longer description would not fit.

3. Select <OK> to accept the changes.

You can now choose <INSERT> to enter a new code, <BROWSE> to select an existing code, <PRINT> to print your existing code information, or <CANCEL> to go to the Setup menu.

For more information on Quantity Restrictions, see the *Restrictions* section in the *Operator's Guide* for your card system.

4.1.7 Reasonability Code Maintenance

Reasonability codes are NOT used with Read/Write ChipKeys! DO NOT assign these codes to R/W ChipKey records!

Choose **(7) Reasonability Code Maintenance** from the Setup menu. A Reasonability Code is a two-digit code that defines the minimum and maximum acceptable odometer entries a driver can enter in the odometer field at the time of fueling. Default codes are listed in your card system *Operator's Guide.*

1. Select <BROWSE> to review existing reasonability codes. To edit an existing code, highlight your selection and press **[ENTER]** and then select <EDIT>. See the note on Page 11.

2. Enter a description. The "Description" is used for reports, the "Browse Description" is used in browse windows and the "Three-Character Description" is used in reports where the longer description will not fit.

3. Select <OK> to accept the changes.

You can now choose <INSERT> to enter a new code, <BROWSE> to select an existing code, <PRINT> to print your existing code information, or <CANCEL> to go to the Setup menu. For more information on Reasonability, see the *Restrictions* section in the *Operator's Guide* for your card system.

This completes the required setup. Next, you should set up your accounts and cards. Once this is complete, you can begin using ***Phoenix Plus***.

Setting up accounts and cards is explained in *Section 5.1, Account Maintenance*, on Page 18. It is suggested you review the next section, *Section 4.2, Optional Setup Parameters* before going to that section.

4.2 OPTIONAL SETUP PARAMETERS

4.2.1 Utility Driver Card Maintenance

If you are importing cards into Phoenix Plus, and some of those cards are assigned to "Account 0000", all those cards will be placed into Utility Driver Card Maintenance. They will not be assigned to ANY account because Phoenix does not use Account 0000.

Choose **(8) Utility Driver Card Maintenance** from the Setup menu. Utility Driver Cards are cards issued to users who will be using vehicles assigned to multiple accounts. An example would be a special "Supervisor Card", not assigned to any specific account.

1. Select <BROWSE> to review existing utility cards.

2. To edit an existing card, highlight your selection and press **[ENTER]** and then select <EDIT>.

3. To add a new card, select <INSERT>. Follow the *Card 1 Maintenance* procedure described on Page 20.

4. Select <OK> to accept the changes.

You can now choose <INSERT> to enter a new card, <BROWSE> to select an existing card, <HISTORY> to review usage statistics, or <CANCEL> to go to the Setup menu.

4.2.2 Printer Interface Selection

Choose **(9) Printer Interface Selection** from the Setup menu. This function matches the ***Phoenix Plus*** software to your printer.

1. Use the arrow keys to find the printer description that most closely matches your printer. If you can't find your model number, refer to your printer's manual to see what type of printer it most closely emulates. If you cannot find a match, use the "Generic Printer" selection.

2. Press **[ENTER]**. Select <OK> to select that printer or <CANCEL> to exit without saving the new printer selection.

   NOTE: *Printer characteristics appear on the right side of the screen.*

4.2.3 Printer Port Selection

Choose **(A) Printer Port Selection** from the Setup menu. This function specifies the printer port on your computer that ***Phoenix Plus*** will use.

1. Use the arrow keys to highlight the PC port to which your printer is connected (the most common port on most PCs is **LPT1**).

2. Select <EXIT> when done.

4.2.4 CARD1 and CARD2 Edit Defaults

Choose either **(B) Card1 Edit Defaults** or **(C) Card2 Edit Defaults** from the Setup menu. These two functions help you enter new Card1 or Card2 information in your ***Phoenix Plus*** database. These options let you set up common entries for each field as defaults, which will then be automatically filled in to each new card you create in Card Maintenance (Page 20). Then, change only the fields unique to each card.

1. Select <EDIT> and enter your desired defaults for each field. See *Card Maintenance* on Page 20 for a description of the fields.

2. Select <OK> to accept the changes.

3. Select <CANCEL> to return to the Setup menu.

4.2.5 ChipKey Codes Maintenance

Choose **(D)** from the Setup menu to display the following list of fields:

```
1. DAILY LIMIT:
2. LOWER ODOM REAS:
3. UPPER ODOM REAS:
```

If you are using ChipKey Read/Write Reasonability software, default values can be placed in the above fields. When setting up Card 1 or Card 2 ChipKey record in Phoenix Plus, these fields appear in the Card 1 or Card 2 ChipKey Maintenance screens.

5.0 Main Menu

Now that you have completed the initial setup procedure, continue start-up activities with selections from the Main menu. This menu (Figure 2) contains the Account Maintenance, Transaction Capture, Immediate Card Update and Timed Card System Capture functions.

To begin, select the Main menu bar to display the Main menu pulldown.

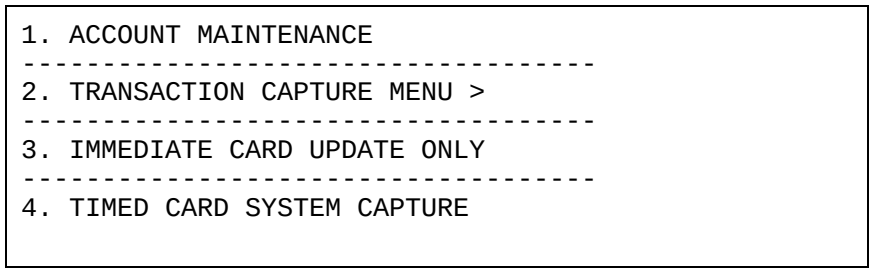


Figure 2 - Main Menu Pulldown

If you are doing start-up, the Main menu is where you create the account database and card database. After your accounts and cards are set up, use the Main menu to:

1. Capture fueling transactions for your card systems

2. Activate the communications necessary to upload all your card changes to your card system immediately

3. Initiate Autopoll to capture transactions from your card system at a set time.

5.1 ACCOUNT MAINTENANCE

Use Account Maintenance to group fuel usage by division, building, department, organization, customer, or any other logical grouping of fuel users who will have their own cards, and for which separate reporting is required. If you have no such groups, simply set up one account for your organization.

Choose **(1) Account Maintenance** from the Main menu for the Account Maintenance menu, Figure 3.

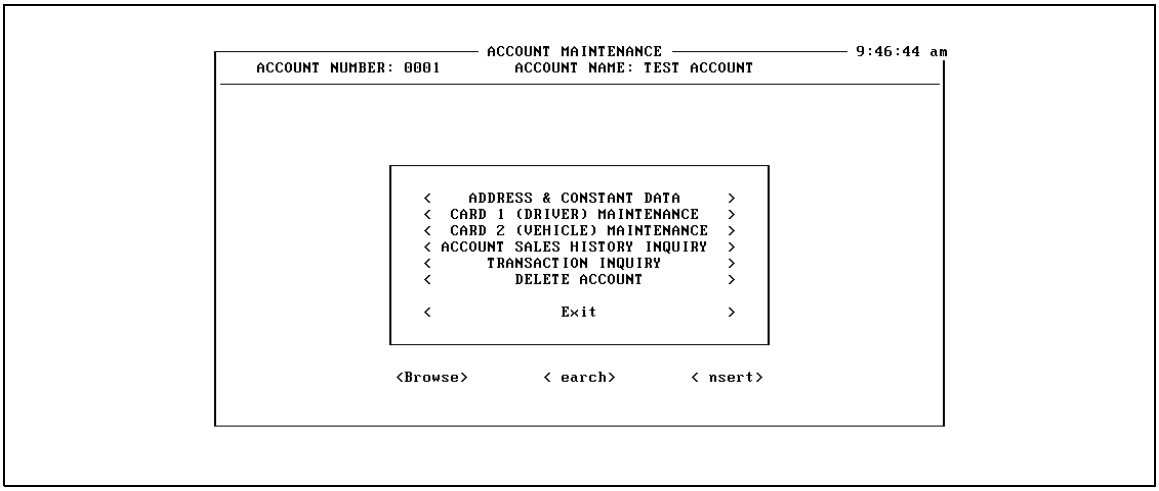


Figure 3 - Account Maintenance Menu

5.1.1 Address/Constant Data

New Accounts

1. Select <INSERT> and enter up to nine characters to name this account.

   NOTE: *If you are using accounts in the System2 or K2500, these account numbers must be set up IDENTICALLY in Phoenix Plus (for example, if there is an Account #1234 in your System2, you must create Account #1234 in Phoenix Plus as well. Account numbers in Phoenix Plus do NOT get passed onto the card system! To create an Account in your System2 or K2500, use the Terminal Emulation For Site function in the Phoenix Utilities menu. Do an INSERT ACCOUNT command at the* ***P>*** *prompt.*

   Account names can be made up of either numeric or alpha characters, and does NOT have to match the account names used in the card systems. In fact, ***Phoenix Plus*** software does not use or maintain the numbers used in the card systems. ***Phoenix Plus*** assigns a fueling transaction by identifying the account to which the Card1 transaction record is attached.

2. All remaining account information is optional. Enter the following as desired or needed, following each with the **[ENTER]** key.

   - Street Address, City, State and ZIP Code
   - Contact name, Phone and FAX numbers
   - Alpha Sort (used when searching by account name, not number)
   - User-Defined fields (labeled earlier in Setup)
   - Transaction Opening Date (typically the current date) - the 'Date Last Active' field is updated from the transaction files during the edit process and is not used here
   - Comments.

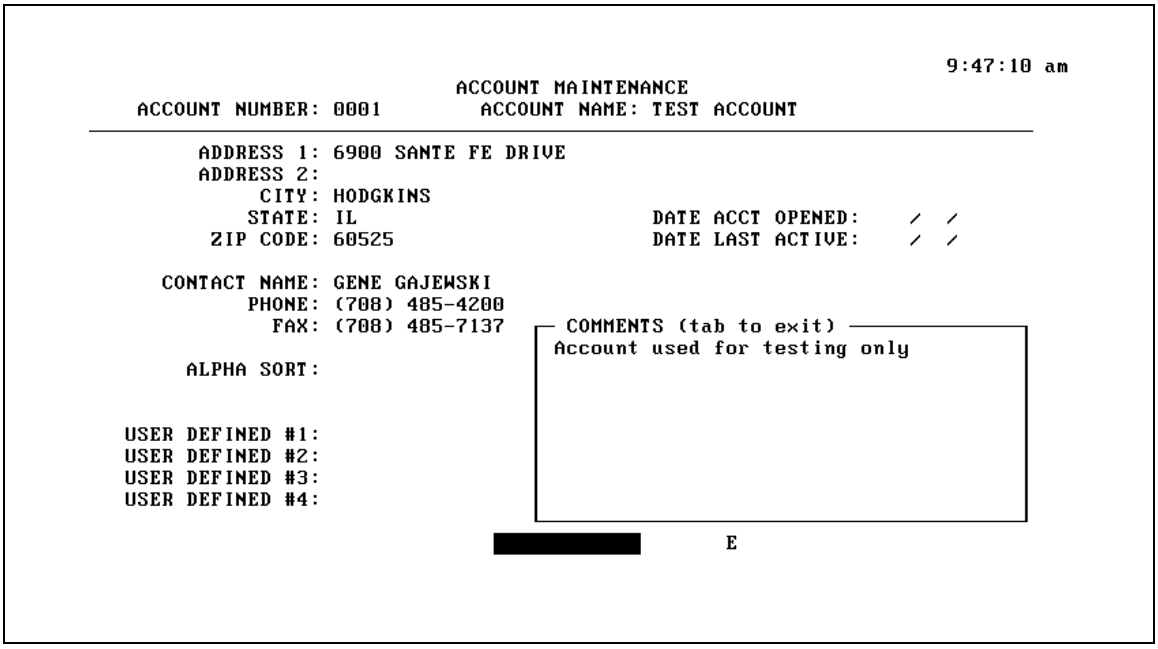


Figure 4 - Address & Constant Data Menu

3. Press **[TAB]** to move to the next field. Save the record with <OK>; erase it with <CANCEL>.

4. Return to the Account Maintenance menu with **[ESC]** or by selecting <CANCEL>.

Existing Accounts

1. Select <BROWSE> to view existing accounts. Highlight your selection and press **[ENTER]**.

2. Select ADDRESS & CONSTANT DATA.

3. Select <OK> to accept the changes.

You can now choose <INSERT> to enter a new account, <BROWSE> to select and edit an existing account, or <SEARCH> to search for an account by Number, Name, or Alpha field or <CANCEL> to exit to the Main menu.

5.1.2 Card1 Maintenance

Use Card1 Maintenance to set up Single or Driver type card records. All additions or changes to the Card1 database can be uploaded to your card system *except for those cards where the UPDATE CARD SYSTEM? flag is set to* **N.** Choose **Card 1 Maintenance** from the Account Maintenance menu to display the Card 1 Maintenance menu, Figure 5.

```
                          CARD 1 MAINTENANCE

ACCOUNT NUMBER: 0001          ACCOUNT NAME: OILCO INCORPORATED
-------------------------------------------------------------------------

           DRIVER:   0000000000
      DESCRIPTION:   LONG HAUL
       SHORT NAME:   BOB                    CARD TYPE:   S SINGLE
       PIN NUMBER:   1234                 CARD STATUS:   A ACTIVE
  EXPIRATION DATE:   12/31/99                MISC KBD:   Y (Y OR N)
   MTHLY ALLOCATE:   0                      ODOMETER?:   Y (Y OR N0
   DAILY ALLOCATE:   0                   REASONABILITY:   00 (NO CHECK)
 WARNING ODOMETER:   0                 PUMP RESTRICTION:   00 (NO RESTR)
  USER DEFINED #A:                      QTY RESTRICTION:   00 (NO RESTR)
  USER DEFINED #B:                   UPDATE CARD SYSTEM:   Y (Y OR N)

-------------------------------------------------------------------------
   DATE LAST USED:   03/21/95            LAST ODOMETER:   0

                     PERIOD TO DATE    YEAR TO DATE      LIFE TO DATE
          DOLLARS:             51.21           51.21          1234.56
          GALLONS:              51.2            51.2           1234.6
     TRANSACTIONS:                 5               5               24

                                  <History>    <Edit>    <Insert>

                      << OK >>    < Cancel >   <Delete>  <ChipKey>
```

Figure 5 - Card Maintenance Menu

NOTE: *When using Phoenix Plus with a System2 equipped for Chipkey Mileage Reasonability, you CANNOT define a "Single" type keyless record. You CAN set up a "Driver" type keyless record, as well as a "Vehicle" ChipKey.*

To create a new card record for Card 1 or Card 2 maintenance (see Page 23):

1. Select <INSERT>. Enter a card number (up to 19 digits; numbers only, no letters). If you have set up the Card Edit Defaults, modify or accept each field as required.

2. Enter a card DESCRIPTION and a SHORT NAME, which is used in some reports.

3. Enter a PIN NUMBER, which can be up to six digits long. No letters are permitted. If desired, enter an EXPIRATION DATE.

4. Enter a MTHLY ALLOCATE and a DAILY ALLOCATE - dollars of fuel allowed per month and day.

5. If desired, enter a WARNING ODOMETER figure, which is used on the Warning Mileage Exception Report (see Page 37).

6. If desired, fill in USER DEFINED #A and USER DEFINED #B with miscellaneous comments.

7. Enter a CARD TYPE. The case of your command determines Language 1 or Language 2: Press uppercase **[S]** for Language 1 Single card (lowercase "s" for Language 2 Single card). Press uppercase **[D]** for Language 1 Driver card, lowercase "d" for Language 2 Driver card.

8. Enter a CARD STATUS code. Press **[A]** to make the card valid (active). Press any other letter to make the card invalid (inactive). If no entry, or an incorrect entry, is made, a pop-up window will show you the possible selections.

9. Enter **[Y]** or **[N]** in the MISCELLANEOUS ENTRY field.

10. Enter **[Y]** or **[N]** in the ODOMETER? field.

11. Enter two-digit code numbers for the following fields: REASONABILITY, PUMP RESTRICTION, QTY RESTRICTION fields. Enter **99** and press **[ENTER]** to get a list of choices for each field. Refer to the *Restrictions* section of your card system *Operator's Guide* for information on these fields.

Leave the DATE LAST USED and LAST ODOMETER fields blank; they will be updated from fueling transactions during the transaction edit.

12. Enter **[Y]** or **[N]** in the UPDATE CARD SYSTEM field to instruct ***Phoenix Plus*** to upload changes in the card record to the card systems.

Select <OK> and then press **[ENTER]** to accept this entry. You can now choose <INSERT> to enter a new card, <BROWSE> to select and edit an existing account, <HISTORY> to review usage statistics, or <CANCEL> to exit the Account menu.

***Phoenix Plus*-Only Fields**

The following fields are used only by the ***Phoenix Plus*** database, and are NOT uploaded to your card system when you perform an upload.

- Long Description
- Warning Odometer
- All User-Defined Fields
- Date Last Used
- All Period-to-Date and Year-to-Date transaction information
- Editable ChipKey fields.

Changing an Existing Record

To change an existing card record, do the following:

1. Select <BROWSE> to view existing records
2. Select *<EDIT>* to edit an existing record
3. Select *<OK>* to accept the changes.

You can now choose <INSERT> to enter a new card, <BROWSE> to select and edit an existing account, <HISTORY> to review usage statistics, or <CANCEL> to exit the Account menu.

ChipKey records require additional editing. Select <CHIPKEY> to open an additional window, shown in Figure 6.

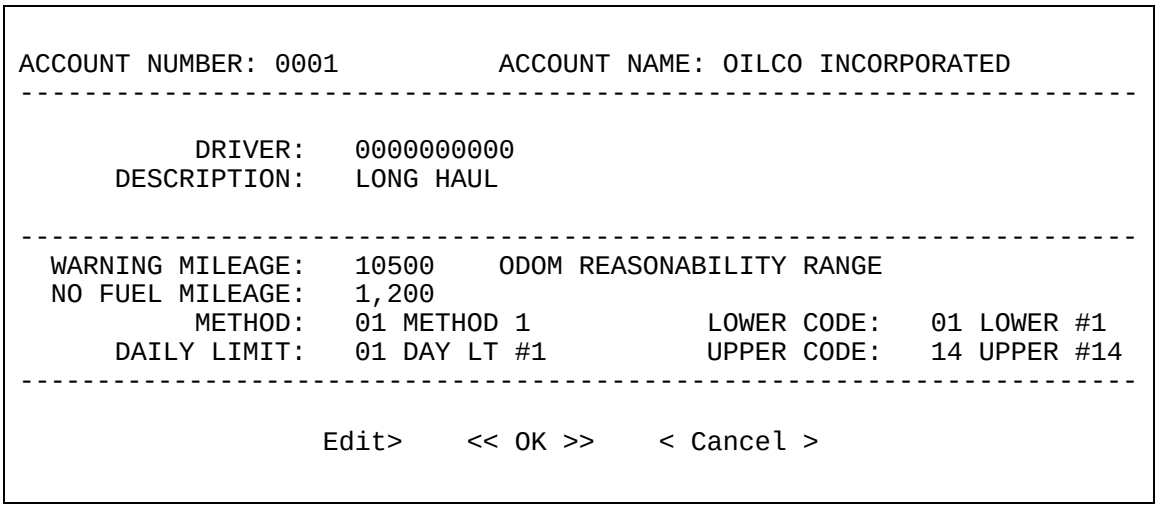


Figure 6 - ChipKey Reasonability Menu

NOTE: *The WARNING MILEAGE, NO FUEL MILEAGE, METHOD, DAILY LIMIT, LOWER CODE and UPPER CODE fields are sent to the System2 during a card update if the System2 is set up to accept the fields.*

5.1.3 Card2 Maintenance

Use Card2 Maintenance to set up Vehicle type card records. All additions or changes to the Card2 database can be uploaded to your card system *except* for those cards where the "UPDATE CARD SYSTEM" flag is set to "N".

Choose **Card 2 Maintenance** from the Account Maintenance menu to display the Card 1 Maintenance menu. This menu (except for the header line) is the same as the Card 1 Maintenance menu (**Figure 4**).

To enter or change a Card2 Record, follow the Card1 Record procedure on Page 20.

5.2 TRANSACTION CAPTURE MENU

Use Transaction Capture to immediately capture and edit fueling transactions from your card systems. Changes to the CARD1 and CARD2 databases are also uploaded to your card systems.

Select **(2) Transaction Capture Menu** from the Main menu to display the choices shown in Figure 7.

```
1. TRANSACTION CAPTURE/CARD UPDATE
2. TRANSACTION EDIT
-----------------------------------
3. TRANSACTION ERROR REPORTS
4. TRANSACTION LOG LISTS
-----------------------------------
5. CLEAR TRANSACTION LOG
```

Figure 7 - Transaction Capture Menu

5.2.1 Transaction Capture/Card Update

This option polls all fueling transactions recorded by the card systems since the last poll. You will be asked which card system sites to capture. Once captured, proceed to the Transaction Edit menu selection to edit the data as required. *If you are using NON-BANK NETWORK software, transactions are cleared from the system after capture.*

Select **(2.1) Transaction Capture/Card Update** from Transaction Capture menu to call up the Transaction Capture/Update screen, Figure 8.

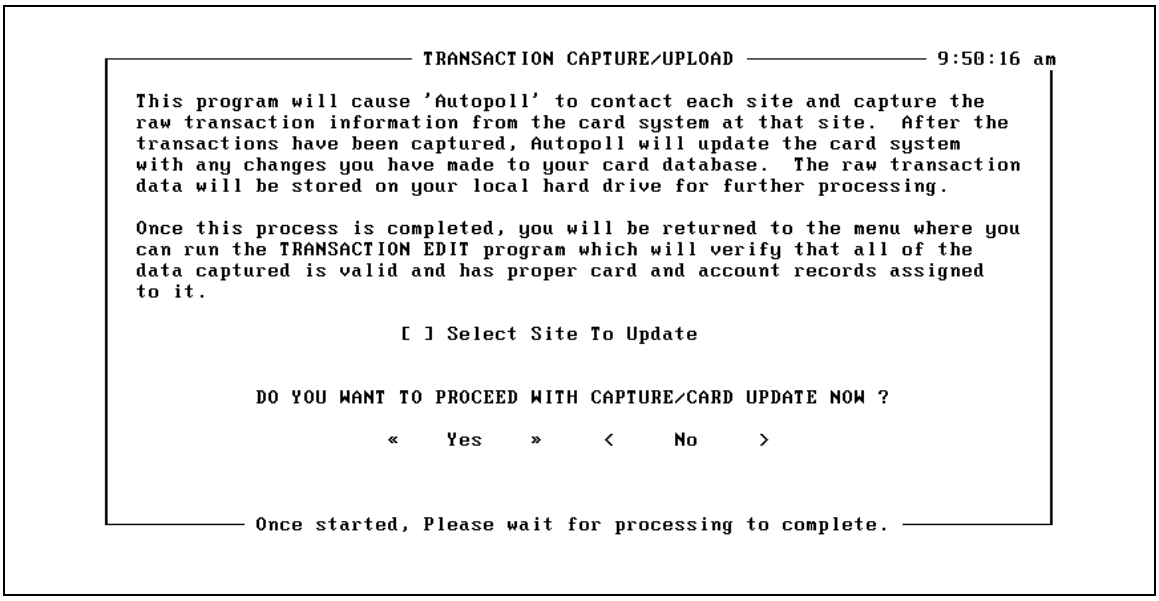


Figure 8 - Transaction Capture/Upload Screen

Press **[ENTER]** to get a selection of sites. Select a site for capture. Select YES to begin the capture or NO to return to the menu.

After site transactions are polled, the next step is to move them from the capture file to the current file for report generation. This is done through the Transaction Edit choice in the Transaction Capture menu.

5.2.2 Transaction Edit

This function processes all transactions captured from card system sites since the last run of Transaction Edit. Transaction validity is checked to make sure each card, site and product for the transaction have been sent to the ***Phoenix Plus*** database.

NOTE: *ALL bank network transactions will fail the transaction edit.*

If errors are found, an error report (Section 5.2.3) is created. To correct errors, go to the MANUAL ENTRY menu (see Page 42) to correct and re-edit the transaction. Acceptable transactions (that pass edit) are put in the current period file. In addition, a variety of fuel usage statistics are accumulated by site, product, account and card for transactions which pass the edit.

5.2.3 Transaction Error Reports

To print a list of transactions which failed the edit, select the Transaction Error Report from the Transaction Capture menu. Transactions containing errors (in relation to the ***Phoenix Plus*** database) can now be viewed, printed or output as a file.

5.2.4 Transaction Log List

To see a list of all polled and edited transactions, select Transaction Log Lists from the Transaction Capture menu. This list contains all transactions polled since the Clear Transaction Log menu selection was run. You are presented with a choice of printing fueling transactions with errors, all fueling transactions, non-fueling transactions, or all transactions. If your printer logs each transaction at the card reader site, this report may be unnecessary.

5.2.5 Clear Transaction Log

This Transaction Capture Menu selection clears the transaction log file. This file holds all captured card system transactions in "raw" format. Once cleared, these transactions are no longer available for printing by the Transaction Log List menu selection.

The transaction log file does NOT automatically clear itself; new entries append to the file and consume more and more of your hard disk space. Because of this, use Clear Transaction Log on a routine basis. Back up older files on tape, or floppies, if desired.

5.3 IMMEDIATE CARD UPDATE ONLY

This Main menu option immediately sends all additions or changes of your CARD1 or CARD2 databases to all card sites. *Using this option will NOT capture fueling transactions from the card systems!* Choose **(3) Immediate Card Update Only** from the Main menu (shown on Page 17).

Immediate Card Update Only uploads new or modified card records and skips the transaction polling process. After choosing this menu item, answer YES to the **Do you want to upload card data?** prompt. ***Phoenix Plus*** immediately dials all card system sites, then uploads the changes.

5.4 AUTOPOLLING

The Timed Card System Capture option in the Main menu: (a) Captures transactions and (b) Updates card record changes at a predefined time. Choose **(4) Timed Card System Capture** from the Main menu (shown on Page 17).

After choosing this function, you will see a screen with Current Time and Start Time fields. The Start Time is when the automatic polling process begins. If you have multiple sites, the polling process attempts to contact each site. If a site contact is unsuccessful, AUTOPOLL will try up to three more contacts. When a site is successfully contacted, the card record changes will be updated and the fueling transactions captured.

NOTE: *If your card system is running some version of Bank Network software, transactions will NOT be cleared after polling. To clear them, you must use the* ***Terminal Emulation For A Site*** *option in Phoenix Plus Utilities (Page 49). Then, use the* ***CLEAR TRANSACTION*** *command to purge the transactions.*

To modify Start Time, alter the AUTOPOLL CALL TIME field in the System Setup menu (see Page 10). Typically, you schedule the Start Time for an Autopoll after your business day has ended.

IMPORTANT

When scheduling an AUTOPOLL for running at a later time (for example, after every one has gone home), remember that *you MUST leave your computer ON, and set for Timed Card System Capture - OPTION 4 in the Main Menu.*

6.0 Reports Menu

Select REPORTS from the menu bar to display the Reports menu, Figure 9.

```
1. ACCOUNT MASTERFILE LISTING
2. CARD1 MASTERFILE LISTING
3. CARD2 MASTERFILE LISTING
-----------------------------------
4. SITE SALES HISTORY REPORT
5. PRODUCT SALES HISTORY REPORT
6. ACCOUNT SALES HISTORY REPORT
-----------------------------------
7. TRANSACTION REPORT
8. ACTIVITY REPORT
9. PUMP RECONCILIATION REPORT
10. WARNING MILEAGE EXCEPTION REPORT
```

Figure 9 - Reports Menu

All reports can be sent to a printer, viewed on the screen, or made into a file for later retrieval. Each type of report is described below:

Account Masterfile Listing	Contains the names, addresses and phone numbers of all accounts. Also contains sales summaries for these accounts.
Card1/Card2 Masterfile Listing	These reports can act as a mailing list or contact list. Contains individual names, addresses and constant data for each card.
Site Sales History	Monthly totals by sale for each of your sites.
Product Sales History	Monthly totals by product for each site.
Account Sales History	Monthly totals of dollars, gallons, miles by account.
Transaction	Transactions grouped by a parameter you select: account number, card number, date or miscellaneous number.
Active	This report is the most flexible, and lets you report Detail, Summary, both Detail and Summary for a group of cards or individual cards.
Pump Reconciliation	A breakdown by product of fuel dispensed by each pump, and site totals for transactions within selected ranges.
Warning Mileage Exception	This report is a list of users exceeding their warning mileage level, and approaching the no-fuel level.

6.1 ACCOUNT MASTERFILE LISTING

Select the **(1) Account Masterfile Listing** option from REPORTS menu. The screen in Figure 10 appears. Depending on your menu choice, the Account Masterfile report will print as a mailing list or contact list, or provide sales summary data for your reference.

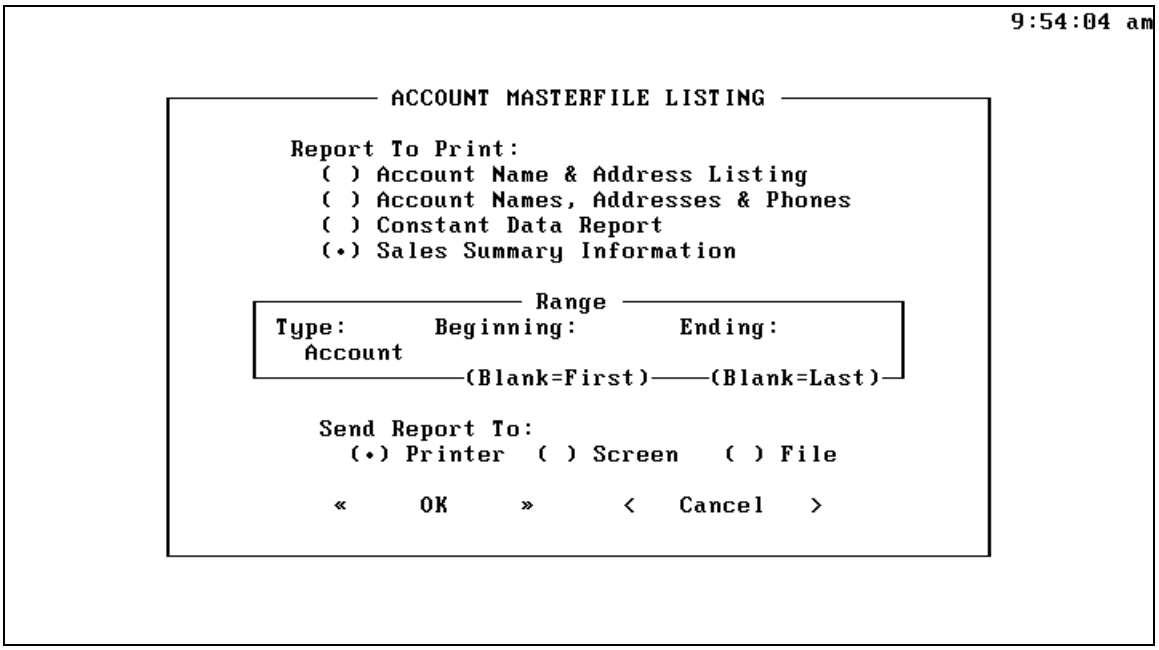


Figure 10 - Account Masterfile Listing Menu

1. Choose a Report To Print: (1) Account Name & Address Listing, (2) Account Names, Addresses and Phones, (3) Constant Data Report, or (4) Sales Summary Information.

2. Define an account range for the report., then select Printer, Screen or File.

3. Press **[CTRL]-[ENTER]**, or select <OK> and press **[ENTER]** to run the report. a sample "Account Names, Addresses and Phones" report header is shown below.

```
DATE: 07/08/96              PETRO VEND INC.                    PAGE:  1
TIME: 2:06 pm  ACCOUNT MASTERFILE - NAMES, ADDRESSES & PHONES

NAME                              ADDRESS                          PHONES
_____________________________________________________________________

TEST ACCOUNT                                                        (  )
          ACCOUNT NUMBER: 1
```

6.2 CARD 1 MASTERFILE LISTING

Select **(2) Card 1 Masterfile Listing** option from the REPORTS menu. The screen in Figure 11 appears. Depending on your menu choice, the Card 1 Masterfile report will print as a mailing list or contact list, or provide sales summary data for your reference.

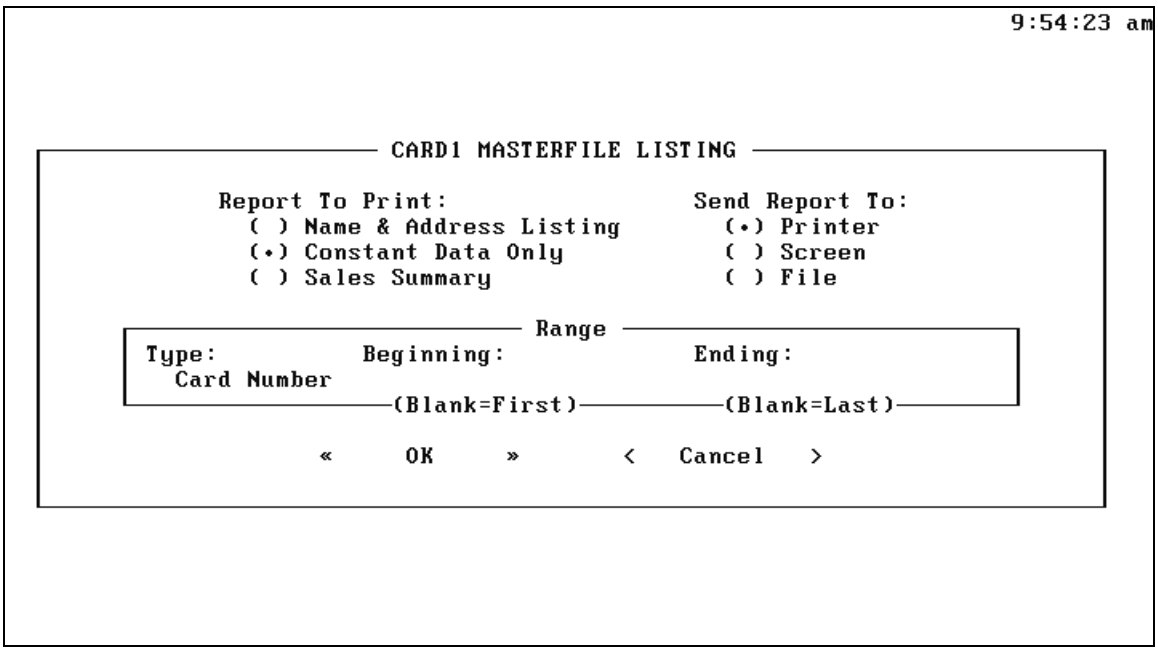


Figure 11 - Card 1 Masterfile Listing Menu

1. Choose a Report To Print for the Card 1 file: (1) Name & Address Listing, (2) Constant Data Only, or (3) Sales Summary.

2. Define a card range for the report, then select Printer, Screen or File.

3. Press **[CTRL]-[ENTER]**, or select <OK> and press **[ENTER]** to run the report. A sample report header for Name & Address Listing/Driver Masterfile is shown below.

```
DATE: 03/02/94              PETRO VEND INC.                    PAGE:  1
TIME: 2:06 pm DRIVER MASTERFILE - NAME & ADDRESS LISTING

CARD      CARD         ACCOUNT  ACCOUNT  LAST     DATE TRANS  DOLLARS
NUMBER    DESCRIPTION  NUMBER   NAME ODOMETER LAST ACTV YTD BILLED YTD
_____________________________________________________________________

123       TEST CARD    1        TEST ACCOUNT  0   2/13/94    2      1.19
```

6.3 CARD 2 MASTERFILE LISTING

Select **(3) Card 2 Masterfile Listing** option from the REPORTS menu to display the screen in Figure 12. As with the Card 1 Masterfile, depending on your menu choice, the Card 2 Masterfile report will print as a mailing list or contact list, or provide sales summary data for your reference.

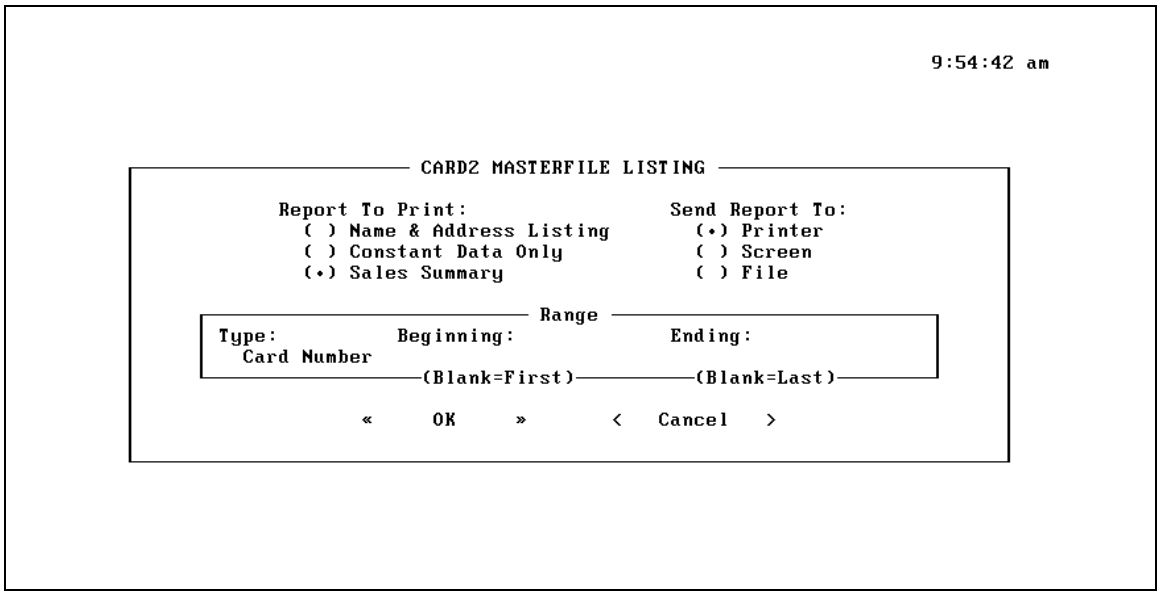


Figure 12 - Card 2 Masterfile Listing Menu

To run a Card 2 Masterfile Listing report, do the following:

1. Choose a Report To Print for the Card 2 file: (1) Name & Address Listing, (2) Constant Data Only, or (3) Sales Summary.

2. Define an account range for the report.

3. Select a destination: Printer, Screen, or File.

4. Press **[CTRL]-[ENTER]**, or select <OK> and press **[ENTER]** to run the report.

The Card 2 report output is similar to the Card 1 report. See the previous page for a sample report header.

6.4 SITE SALES HISTORY REPORT

Select **(4) Site Sales History Report** from the REPORTS menu to display the screen in Figure 13. This report prints monthly totals by product for each site for your reference. The only limit to the number of sales files retained is disk space on your computer.

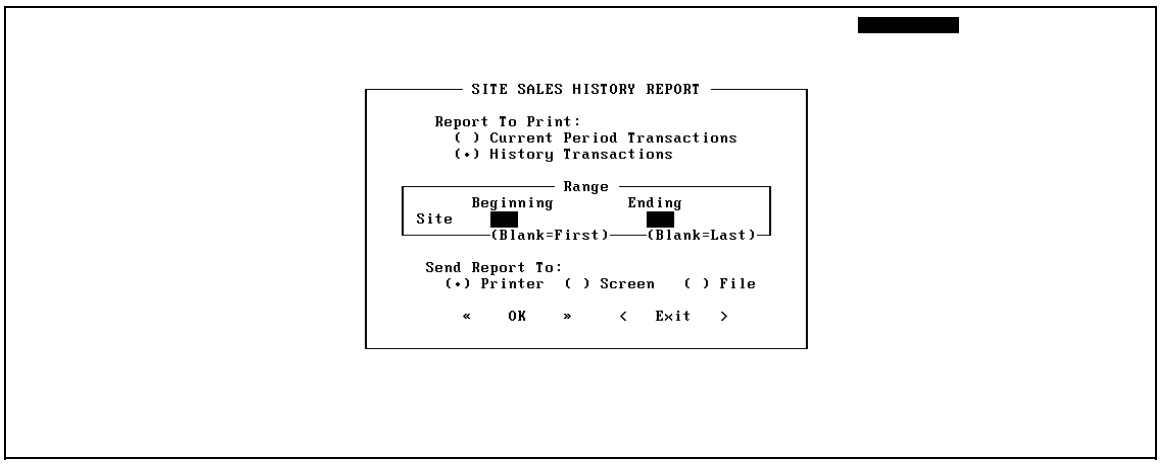


Figure 13 - Site Sales History Report Menu

1. Choose Report: Current Period Transactions or History Transactions. Then, enter a site number range for the report, then select a destination: Printer, Screen, or File.

2. Press **[CTRL]-[ENTER]**, or select <OK> and press **[ENTER]** to run the report. A sample Current Year Site Sales report is shown below.

```
DATE: 03/02/94              PETRO VEND INC.                      PAGE:  1
TIME: 2:06 pm  SITE SALES HISTORY REPORT - CURRENT YEAR
SITE NUMBER:     001   NAME:  SITE #1 MAIN STREET
PRODUCT NUMBER:  UNL   NAME:  UNLEADED GASOLINE
                              DOLLARS           GALLONS
               JANUARY:       6.00              4.0
              FEBRUARY:       7.50              5.0
                 MARCH:       4.50              3.0
                 APRIL:       0.00              0.0
                   MAY:       0.00              0.0
                  JUNE:       0.00              0.0
                  JULY:       0.00              0.0
                AUGUST:       0.00              0.0
             SEPTEMBER:       0.00              0.0
               OCTOBER:       0.00              0.0
              NOVEMBER:       0.00              0.0
              DECEMBER:       0.00              0.0
                              ----              ---
                TOTALS:       18.00             12.0
```

6.5 PRODUCT SALES HISTORY REPORT

Select **(5) Product Sales History Report** from the REPORTS menu for the screen in Figure 14. This report will print monthly totals by product for each site. The only limit to the number of product history files retained (for this or any history report) is the hard disk space on your computer.

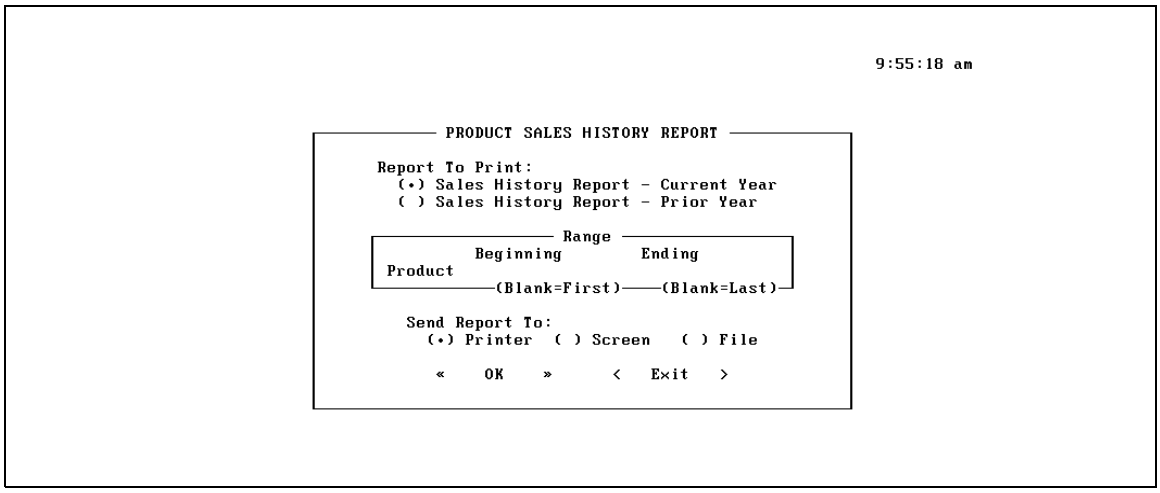


Figure 14 - Product Sales History Report Menu

1. Choose Report: Sales History/Current Year or Sales History /Prior Year.

2. Enter Product Range, select destination (Printer, Screen, or File) and press **[CTRL]-[ENTER]**, or select <OK> and press **[ENTER]** to run the report. A sample Current Year Product Sales report is shown below.

```
DATE: 03/02/94              PETRO VEND INC.                    PAGE:  1
TIME: 2:06 pm PRODUCT SALES HISTORY REPORT - CURRENT YEAR
PRODUCT:  UNLEADED GASOLINE
CODE:     UNL
                             DOLLARS          GALLONS
               JANUARY:      6.00             4.0
              FEBRUARY:      7.50             5.0
                 MARCH:      4.50             3.0
                 APRIL:      0.00             0.0
                   MAY:      0.00             0.0
                  JUNE:      0.00             0.0
                  JULY:      0.00             0.0
                AUGUST:      0.00             0.0
             SEPTEMBER:      0.00             0.0
               OCTOBER:      0.00             0.0
              NOVEMBER:      0.00             0.0
              DECEMBER:      0.00             0.0
                             ----             ---
                TOTALS:      18.00            12.0
```

6.6 ACCOUNT SALES HISTORY REPORT

Select **(6) Account Sales History Report** from the REPORTS menu to show the screen in Figure 15. This report contains Quantities and Amounts by month for current year and prior year for each account, and a total on these items for all accounts.

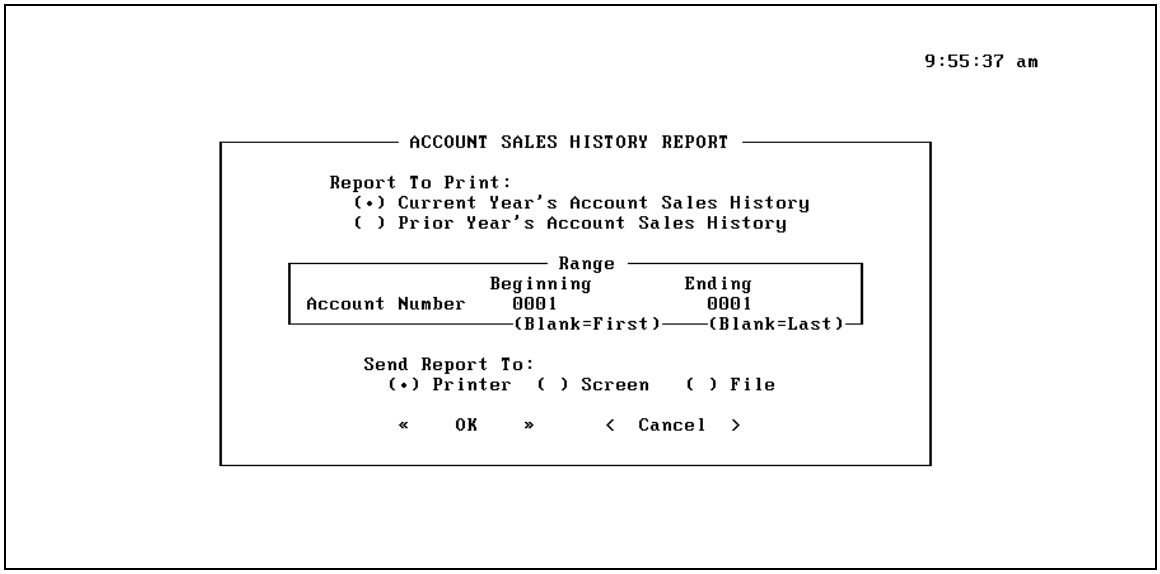


Figure 15 - Account Sales History Report Menu

1. Choose Current Year Account Sales History or Prior Year Account Sales History.

2. Select account number range and a destination: Printer, Screen, or File. Press **[CTRL]-[ENTER]**, or select <OK> and press **[ENTER]** to run (shown below).

```
DATE: 03/02/94              PETRO VEND INC.                      PAGE:  1
TIME: 2:06 pm          ACCOUNT SALES HISTORY REPORT
                         UNIT OF MEASURE: GALLONS
                          CURRENCY TYPE: DOLLARS

ACCT NUM  JAN FEB  MAR  APR  MAY JUN  JUL AUG SEP OCT  NOV  DEC
-------------------------------------------------------------------
123       TEST ACCOUNT

QTY SOLD:  0 0    0    0    0   0    0   0   0   0    0    0
AMT SOLD:  0 0    0    0    0   0    0   0   0   0    0    0
QTY PRYR:  0 0    0    0    0   0    0   0   0   0    0    0
-------------------------------------------------------------------
REPORT TOTALS: ACCOUNTS

QTY SOLD:  0 0    0    0    0   0    0   0   0   0    0    0
AMT SOLD:  0 0    0    0    0   0    0   0   0   0    0    0
QTY PRYR:  0 0    0    0    0   0    0   0   0   0    0    0
-------------------------------------------------------------------
```

6.7 TRANSACTION REPORT

Select **(7) Transaction Report** from the REPORTS menu to display the screen in Figure 16. This report will print a list of the transactions that fall within your selected search parameters.

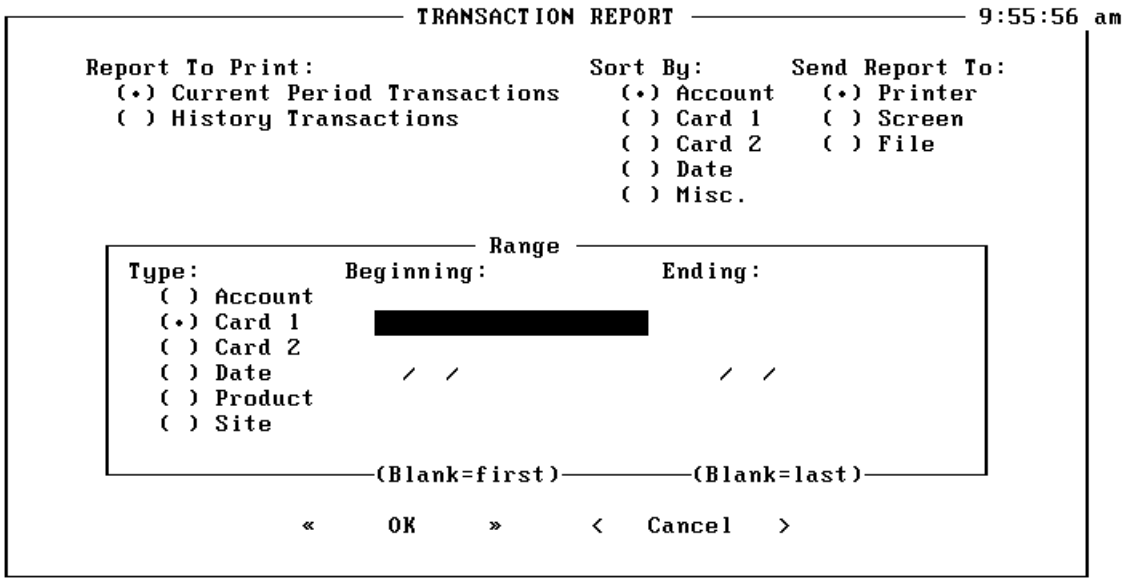


Figure 16 - Transaction Report Menu

1. Select Current Period Transactions or History Transactions.

2. Select a Sort By option: Account Number, Card1 Number, Card2 Number, Date or Misc, and then select a destination: Printer, Screen, or File. Choose a Range Type (Account, Card 1, Card 2, Date, Product, or Site) and a Range for that type.

3. Press **[CTRL]-[ENTER]**, or select <OK> and press **[ENTER]** to run the report.

```
DATE: 03/02/94              PETRO VEND INC.                      PAGE:  1
TIME: 2:06 pm     TRANSACTION REPORT - CURRENT PERIOD

DATE  TIME  TRAN SITE DRIVER VEH ODOM KBD  ACCT PUMP PROD QTY PRICE AMT
_____________________________________________________________________
2/28/94  12:00 111   01     2   1234   1    01   02   12  1.00   12
```

6.8 ACTIVITY REPORT

Select **(8) Activity Report** from the REPORTS menu to display the menu in Figure 17. This report is often used by resellers as the detail report for invoicing and by fleet managers as a consumption report for drivers, vehicles and accounts.

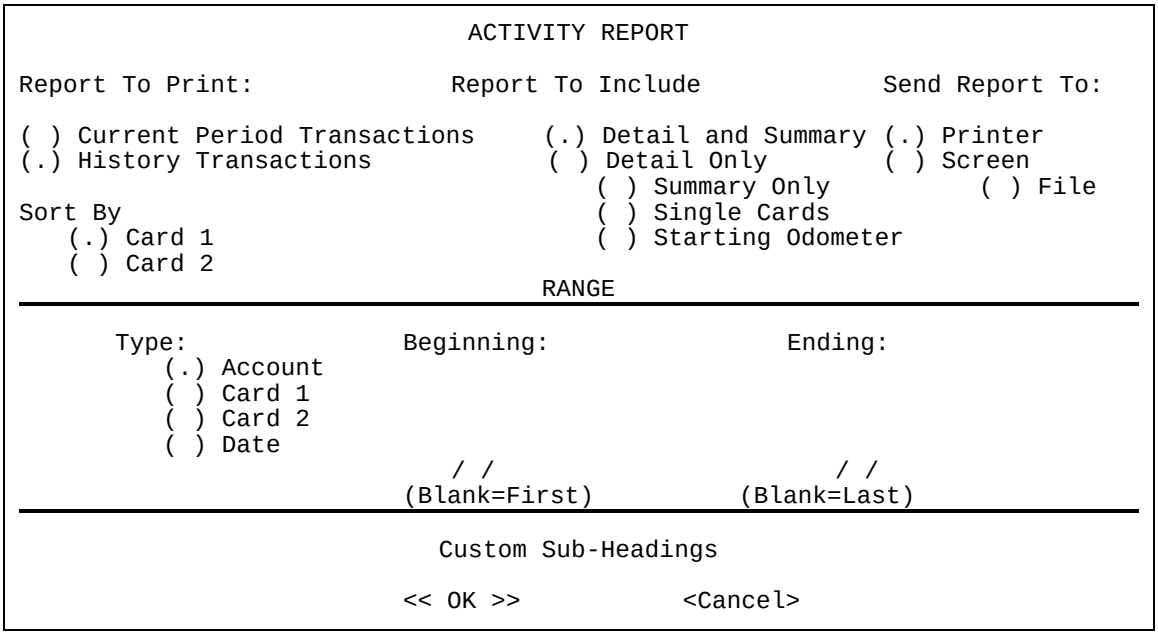


Figure 19 - Activity Report Menu

1. Select Current Period Transactions or History Transactions.

2. Select a 'Sort By' option: Card 1 Number or Card 2 Number.

3. Select Report To Include: Detail and Summary, Detail Only or Summary Only. Enable or disable the Single Cards option (expanded view of each card), OR view the starting odometer mileage, used to calculate fuel economy in MPG.

4. Choose a destination: Printer, Screen, or File.

5. Choose a Range Type (Account, Card 1, Card 2, Date) and a Range for that type. The "Range Type" does NOT have to be the same as your "Sort By" choice. Add a subheading if you want.

6. Press **[CTRL]-[ENTER]**, or select <OK> and press **[ENTER]** to run the report.

6.9 PUMP RECONCILIATION REPORT

Select **(9) Pump Reconciliation Report** from the REPORTS menu to show the screen in Figure 18. This report shows a breakdown (by product) of fuel dispensed by each pump, along with a site total for transactions within the selected ranges. *Only current period transaction data is used.*

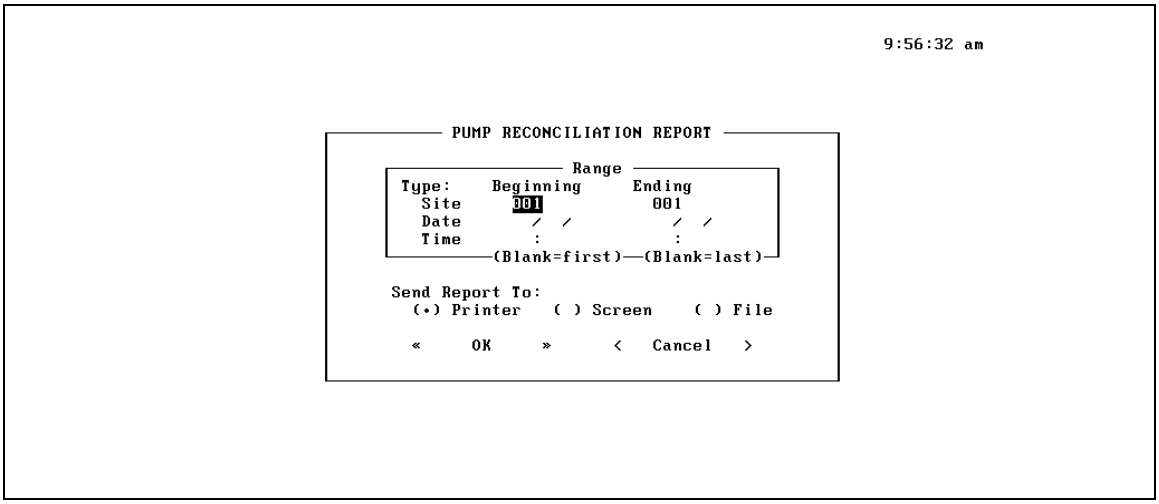


Figure 18 - Pump Reconciliation Report Menu

1. Select Range Types: Site, Date and Time. Enter the Beginning and Ending conditions for your selected ranges.

2. Select Printer, Screen, or File, then ress **[CTRL]-[ENTER]**, or select <OK> and press **[ENTER]** to run the report (shown below).

```
DATE: 03/02/94              PETRO VEND INC.                    PAGE:  1
TIME: 2:06 pm      PUMP TOTALS RECONCILIATION REPORT
                       FOR PERIOD: Beginning thru Ending
                                   Beginning thru Ending

SITE:  001 - SITE #1 MAIN STREET
    PUMP: 01
          PRODUCT:  UNLEADED GASOLINE         126.370
                                                        --------
                                  PUMP 01 TOTAL:        126.370

    PUMP: 02
          PRODUCT:  PREMIUM GASOLINE                        456.000
                                                            -------
                                  PUMP 02 TOTAL:            456.000
                                                            -------
                                  SITE #1 MAIN STREET:      582.370
```

6.10 WARNING MILEAGE EXCEPTION REPORT

Select **(10) Warning Mileage Exception Report** from the REPORTS menu. This report gives you a list of all users within a specified range of accounts (Figure 19) that have exceeded their warning mileage level.

```
                WARNING MILEAGE EXCEPTION REPORT

                      Beginning   Ending
        Account Number:


        Send Report To:
          ( ) Printer    ( ) Screen      ( ) File

          < OK >       < Cancel >
```

Figure 19 - Warning Mileage Exception Report Menu

1. Select a **Beginning** and **Ending Account Number** for the range

2. Select a Destination: Printer, Screen, or File.

3. Press **[CTRL]-[ENTER]**, or select <OK> and press **[ENTER]** to run the report:

```
DATE: 07/30/96          PETRO VEND INC.                PAGE:  1
TIME: 2:06 pm     WARNING MILEAGE EXCEPTION REPORT


CARD NO.              CARD NAME        WARNING
                                       ODOMETER    MILEAGE    OVERAGE

-------------------------------------------------------------------------

0000000001            TESTCARD         100          200       100
```

Notes:

7.0 Manual Entry Menu

The MANUAL ENTRY menu lets you add fueling transactions that occurred outside the card system network. There is also a facility for editing or deleting transactions, such as those which failed in Transaction Edit. Select MANUAL ENTRY from the menu bar in the initial ***Phoenix Plus*** screen to display the menu in Figure 20.

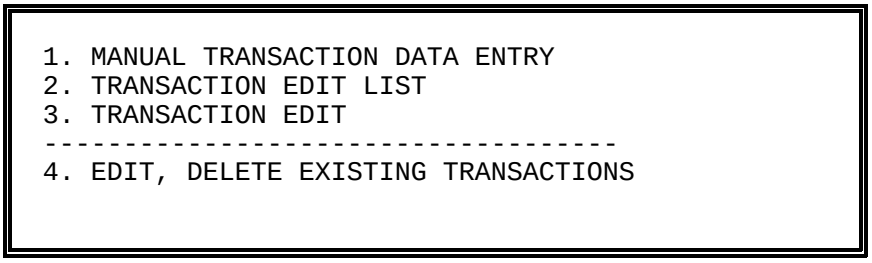


Figure 20 - Manual Entry Menu

7.1 MANUAL TRANSACTION DATA ENTRY

Choose **(1) Manual Transaction Data Entry** from the MANUAL ENTRY menu to display the menu in Figure 21. This lets you add transactions not obtained by polling.

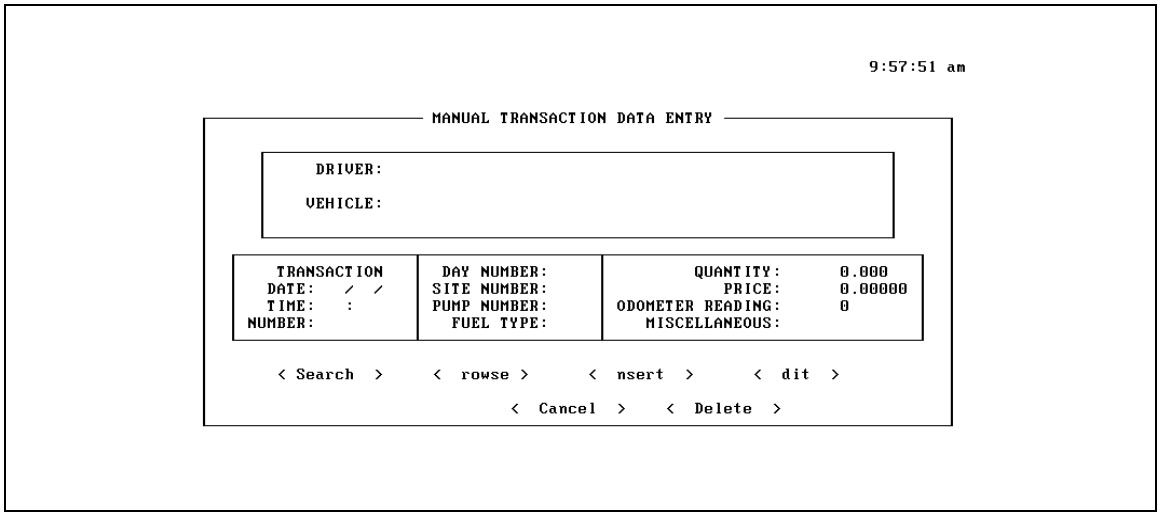


Figure 21 - Manual Transaction Data Entry Menu

To use Manual Transaction entry, do the following:

1. Select < BROWSE > to find transactions that need editing or replacing; highlight an item and press **[ENTER]**.

2A. Select < EDIT > to make any changes desired. When *editing* an existing transaction, the Card/Account statistics do *not* get updated.

2B. To add a new transaction, select < INSERT >. When *adding* a transaction, the Card/Account statistics *are* updated. Use this function to add fueling sessions to the System2 that took place outside the card system.

3. Enter the Driver number (CARD 1). Leave this field blank, or type a partial card number to get a display of card numbers. Select the desired card.

4. Enter the Vehicle (CARD 2) number if required.

5. Items 5A-5D are optional:

   5A. TRANSACTION NUMBER
   5B. DAY NUMBER - the Sequence Number from the transaction.
   5C. SITE NUMBER.
   5D. PUMP NUMBER used in the transaction.

6. Enter a FUEL TYPE number, or enter 99 to get a list of available fuel types.

7. Enter the transaction QUANTITY.

8. Items 8A - 8C are optional:

   8A. PRICE field - the unit price for the product.
   8B. ODOMETER keyboard entry.
   8C. MISCELLANEOUS keyboard entry.

9. Select < OK > to save or < CANCEL > to clear this entry.

You can now continue to correct or add more transactions, or press **[ESC]** or select < CANCEL > to return to the Manual Entry menu.

7.2 TRANSACTION EDIT LIST

To get a printout of any transaction in the MANUAL ENTRY posting file, select **(2) Transaction Edit List** from the Manual Entry menu (shown on Page 39). The screen in Figure 22 appears.

The screen tells you how many transactions require action (editing) in the following categories: Need To Print Reports (those that did not pass the Edit), Manually-Entered Transactions (from the Manual Entry menu), and how many transactions need to be "Fixed and Re-edited".

The number of Fueling Transactions Successfully Processed, Unsuccessfully Processed and Duplicated is also given.

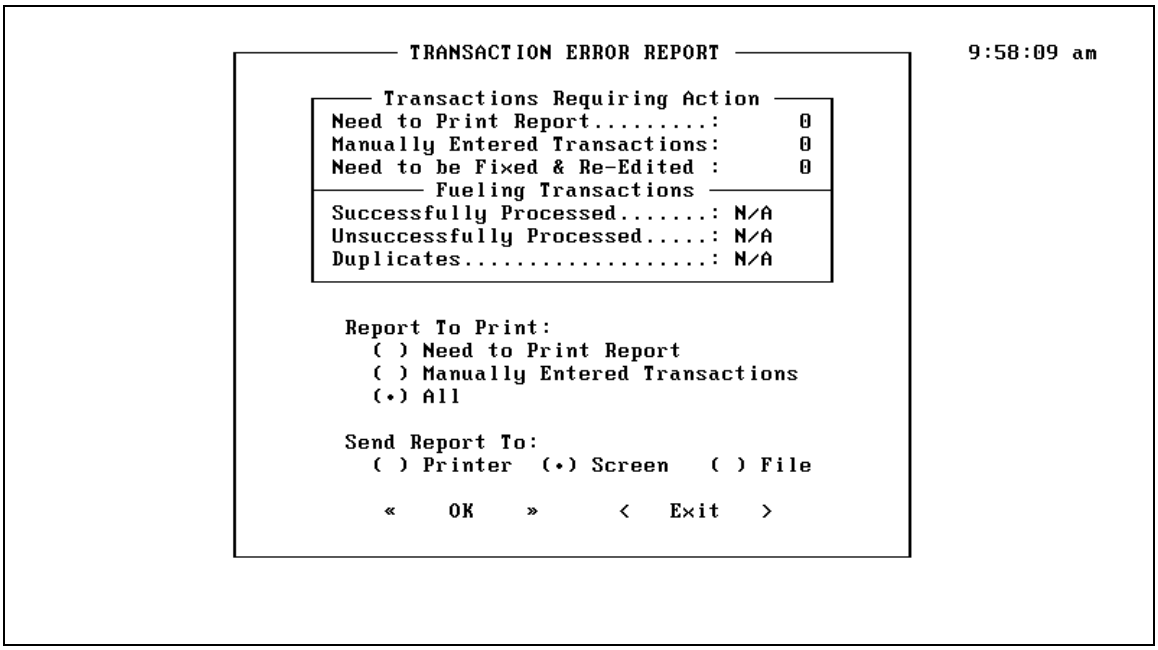


Figure 22 - Transaction Edit List

To perform a Transaction Edit List, do the following:

1. Select a Report To Print: Need To Print Report, Manually-Entered Transactions, or All (both types).

2. Select a destination: Printer, Screen, or File.

3. Press **[CTRL]-[ENTER]**, or select <OK> and press **[ENTER]** to run the list.

7.3 TRANSACTION EDIT

This option processes all transactions in the MANUAL ENTRY posting file. It verifies that a valid card, account, product and site exists for each transaction. In addition, various usage statistics are accumulated for each transaction. Choose **(3) Transaction Edit** from the Manual Entry menu.

> **IMPORTANT**
>
> Transaction Edit MUST be run BEFORE the transactions can be used in other reports.

After selecting this option, the following message appears:

```
This process will go through all manual transactions and edit each of
the valid fueling transactions, storing them in the current period
transaction file. Totals for quantity, price and number of transactions
will be updated in the account, card and site/product files.

DO YOU WANT TO PROCEED WITH MANUAL EDIT NOW?
```

Press **[Y]** or **[N]**. Once processing begins, allow it to complete. If a transaction passes edit successfully, it goes in the Current Period file. Those not passing the edit will stay in the Manual Entry Posting File.

7.4 EDIT, DELETE EXISTING TRANSACTIONS

This option adjusts or deletes information in successfully captured transactions stored in the Current Period Transaction File. Choose **(4) Edit, Delete Existing Transactions** from the Manual Entry menu. The screen in Figure 23 appears.

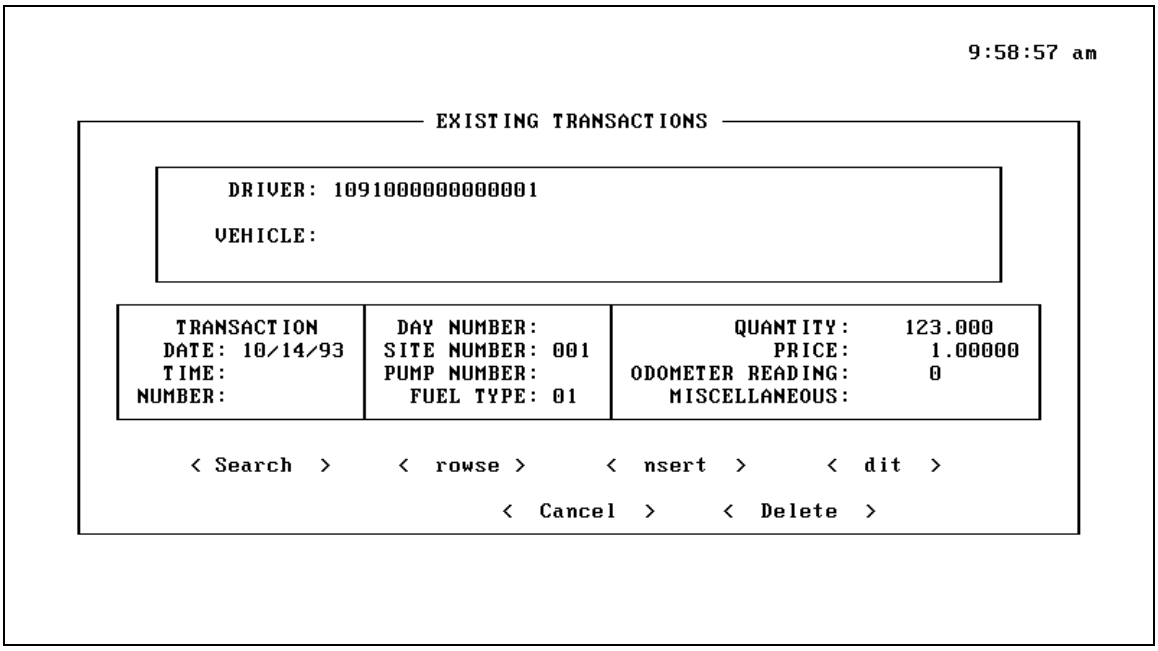


Figure 23 - Edit. Delete Existing Transactions Screen

To edit or delete transactions, do the following:

1. Select < SEARCH > or < BROWSE > to search through the transactions in the Current Period file to find the desired transaction.

2. Select < EDIT > to make any adjustments. Select < DELETE > to remove transactions from the Current Period purge file.

3. Use Manual Transaction Data Entry (Page 39) to re-enter deleted transactions.

Run the Transaction Edit List after editing or deleting transactions. *When editing or deleting existing transactions, the Card/Account statistics do NOT get updated.*

Notes:

8.0 Period End Menu

The PERIOD END menu contains functions that are normally performed at the end of an accounting period (typically at the end of a month). Select PERIOD END from the Main Menu to display the Period End menu, Figure 24.

```
1. PERIOD END PROCESS
2. MOVE TRANSACTIONS TO HISTORY
3. PURGE HISTORY TRANSACTIONS
```

Figure 24 - Period End Menu

8.1 PERIOD END PROCESS

Period End Process clears the period-to-date fields in the account, card, site and product files. It also advances the CURRENT PROCESSING MONTH field in the System Options file, and resets period-to-date fields. *Period End Process must be performed to sort current transaction data into the correct months for sales and usage history reports.*

If you answer "YES" to Year End, the 12 monthly statistics (January through December) for account, card, site and product will be moved to the prior year fields and the CURRENT PROCESSING MONTH will be set to 1. The former Prior Year fields are deleted. Choose **(1) Period End Process** from the PERIOD END Menu to display the screen in Figure 25.

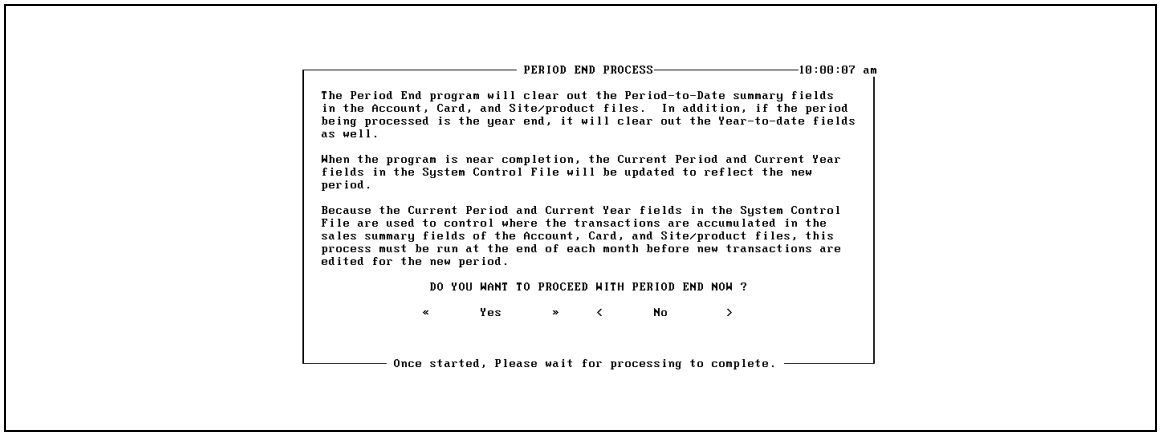


Figure 25 - Period End Process Menu

IMPORTANT - *Running Period End clears ONLY the period-to-date field, and has no effect on the 12 monthly (January - December) statistics kept for each account, card, site and product. The transaction date determines the month in which these statistics are accumulated.*

Select YES to the **DO YOU WANT TO PROCEED WITH PERIOD END NOW?** question to begin the period end process. Select NO to return to the PERIOD END menu. If the CURRENT PROCESSING MONTH is 12, as described above, you will be prompted to run Year End.

Transactions can still be manipulated after being moved to history - processing will take longer because the files are no longer in "current" memory.

8.2 MOVE TRANSACTIONS TO HISTORY

This process moves fueling transactions from the current period file to the history file. By running this procedure on a routine basis, your current period transaction file will be smaller and easier to manage. This procedure can be run at any time. Choose **(1) Move Transactions To History** from the Period End Menu for the screen in Figure 26.

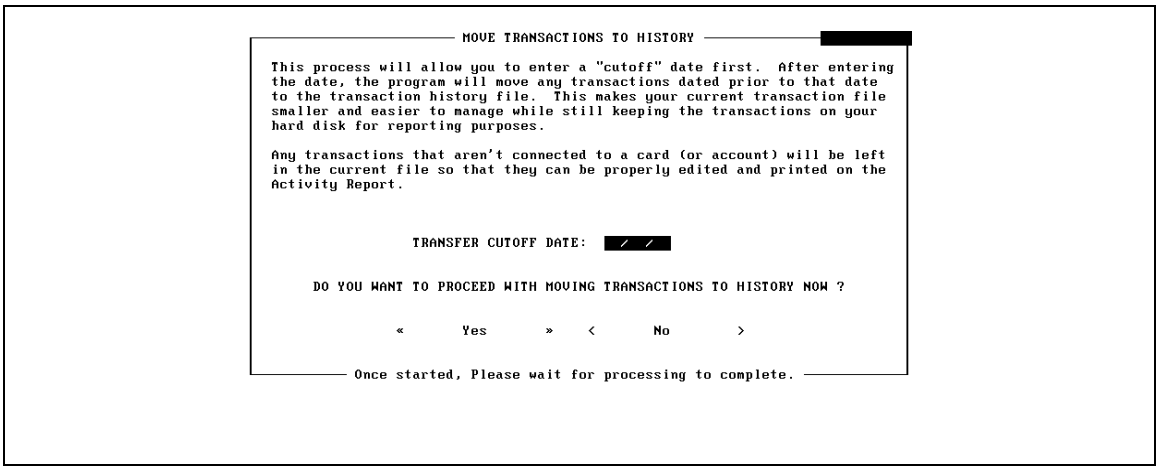


Figure 26 - Move Transactions To History Menu

The program moves any transactions dated prior to cutoff date to the history file. For example, if a cutoff date of 02/01/94 was entered, all transactions from 1/31/94 and before would be moved to history.

Select YES to proceed or NO to return to the PERIOD END menu.

NOTE: *If you are using the Export feature, you must export BEFORE moving transactions to history. Exports only use current period data.*

8.3 PURGE HISTORY TRANSACTIONS

This process removes transactions from the history file based on a cutoff date. Since the history file can get very large and take up excessive disk space, this procedure should be run on a routine basis. This procedure can be run at Period End or any other time.

It is a good idea to have a current backup of your system prior to running the purge.

Choose **(3) Purge History Transactions** from the PERIOD END Menu, and then enter a cutoff date (all transactions dated prior to the cutoff date from will be removed from the history file).

For example, if a cutoff date of 04/01/94 was entered, all transactions from 3/31/94 and before would be removed from history. Press **[Y]** to continue or **[N]** to cancel.

Notes:

9.0 Utilities Menu

The UTILITIES menu accesses Database Utilities and Card System Utilities. It also contains terminal emulation and data-exporting functions, as well as options for easier record and file maintenance. Select UTILITIES from the Main menu to display the Utilities menu, Figure 27.

```
1. DATABASE UTILITIES  >
-----------------------------------------------
2. CARD SYSTEM UTILITIES  >
-----------------------------------------------
3. TERMINAL EMULATION FOR A SITE
-----------------------------------------------
4. DATA EXPORT
-----------------------------------------------
5. CALCULATOR
6. CALENDAR/DIARY
7. DOS SHELL
-----------------------------------------------
8. EDIT TEXT FILE
9. VIEW COMM LOG FILES
```

Figure 27 - Utilities Menu

9.1 DATABASE UTILITIES

Highlight this Utilities choice to display the menu in Figure 28:

```
1. PACK DATABASE FILES
2. RE-INDEX DATABASE FILES
3. PURGE SELECTED FILES
```

Figure 28 - Database Utilities Popupster

9.1.1 Pack Database Files

This utility removes deleted records from the ***Phoenix Plus*** database, recovering the file space previously consumed by those records.

9.1.2 Re-Index Database Files

Use the Re-Index Database utility if you suspect file damage has occurred to a database. This may occur after a power outage, or other abnormal termination of the ***Phoenix Plus*** software. This function can be run any time you suspect file problems, not just after a system crash or other problem. Re-indexing files can also be done from the `C:\PHOENIX>` prompt - just type **REINDEX** and press ENTER.

9.1.3 Purge Selected Files

This utility displays a list of primary files and directories. Simply click on the file(s) you want to permanently delete from the system, then answer Y to any confirmation request.

9.2 CARD SYSTEM UTILITIES

Use this function to back up or restore site configurations, to back up or restore card records and to import cards from an existing card system backup. Select **(2) Card System Utilities** from the Utilities menu to display Figure 29:

```
1. BACKUP SITE CONFIGURATION
2. RESTORE SITE CONFIGURATION
-----------------------------------------------
3. BACKUP CARD RECORDS
4. RESTORE CARD RECORDS
-----------------------------------------------
5. IMPORT CARDS
-----------------------------------------------
6. RESEND PHOENIX CARD UPDATE
```

Figure 29 - Card System Utilities Pull down

9.2.1 Backup Site Configuration

This utility backs up configuration data (pump parameters, programmable messages, etc.) from the card system memory to a file on your hard disk. This file can be restored to the card system to minimize downtime if the card system memory is lost.

Select **(1) Backup Site Configuration** from the Card System Utilities menu. To run backup:

1. Press **[ENTER]** at the **Select Site to Update** prompt

2. Choose a site to back up.

3. Select YES to begin a backup; NO returns you to the UTILITIES menu. ***Phoenix Plus*** calls the card systems and performs the backups. Time for backup varies depending on the number of sites called.

NOTE: *The site will be out of operation during the backup - a SYSTEM DOWN message is displayed on the FITs.*

9.2.2 Restore Site Configuration

This Card System utility restores a previously backed-up configuration. Selecting **(2) Restore Site Configuration** from the Card System Utilities menu displays a screen containing the same message as the Backup Site Configuration function.

Because it erases current configuration data from the system, the Restore procedure should only be used if your system memory is lost.

To restore, press **[ENTER]** at the prompt, choose the site to restore, then select YES to begin the procedure or NO to return to the UTILITIES menu.

9.2.3 Backup Card Records

This utility backs up the card and account record information in the card system's memory to a file on your computer's hard disk. This file can later be restored to the card system to minimize downtime if the card system memory is lost. Selecting **(3) Backup Card Records** from the Card System Utilities menu displays a screen containing the same message as the Site Configuration functions.

To run the Backup Card Record operation, press **[ENTER]** at the Select Site to Update prompt. Choose the site to Backup. Select YES to begin the procedure or NO to return to the UTILITIES menu.

9.2.4 Restore Card Records

This Card System utility restores previously backed-up cards and account information. Selecting **(4) Restore Card Records** from the Card System Utilities menu displays a screen containing the same message as the Backup Card Records function.

Before restoring cards, make sure all existing cards in the range you are restoring have been removed from the system. If you do not remove them, the system attempts (and fails) to duplicate them, causing the Restore operation to fail.

Press **[ENTER]** at "Select Site" prompt and choose the site to Restore. Select YES to begin the procedure or NO to return to the UTILITIES menu.

9.2.5 Import Cards

This Card System utility is designed for a first time ***Phoenix Plus*** user who has an operational card system and wants to create a card database from a Card Record Backup file. Selecting (5) Import Cards from the Card System Utilities menu generates the following prompt:

```
< Select Directory: > C:\PHOENIX\
          Source File:
```

Any Card Record Backup file can be read with this function. If you want to create a Card Record Backup file with ***Phoenix Plus***, follow the directions under BACKUP CARD RECORDS on this same menu.

IMPORTANT

IF accounts are already set up in your SYSTEM2 or K2500 system, and you want to import records into Phoenix Plus, you MUST FIRST create accounts in Phoenix Plus with the SAME NUMBER as those existing SYSTEM2 or K2500 accounts.

IF ONLY ONE ACCOUNT IS DEFINED, ALL CARDS WILL GO INTO THAT ACCOUNT.

After selecting **Import Cards**, enter the Backup Cardfile directory name, then enter the name of the Backup Card file. If ***Phoenix Plus*** was used to create the Backup file and the default ***Phoenix Plus*** directory was selected during the install procedure, the directory of the backup file is "C:\PHOENIX\".

The Backup file name will be "BC*NNN*" where *NNN* is the 3-digit site number of the file. For example, a backup file for Site 001 would be named "BC001". If your backup card file doesn't show an account number for assigned cards, an Account Browse window pops up - select an account to which you want the newly imported cards to be assigned. Once started, the import process can process about 50 cards per minute.

9.2.6 Resend Phoenix Card Update

This utility flags all cards in the Phoenix Plus system (driver and vehicle cards) for automatic sending to the Petro Vend unit. They will be flagged as new cards.

Use Resend in the unlikely event one of your card system loses its card file, and you did not perform a card record backup. You can resend the card file update from the Phoenix Plus database to the site which lost its card file. Another use for Resend: it makes updating and starting up a *new* site fast and easy.

9.3 TERMINAL EMULATION FOR A SITE

Use this utility to contact Petro Vend card systems to perform routine maintenance or changes. When this option is selected, the Autopoll program will execute the "CHATxxx.CMD file in order to connect you with the card system.

"Routine" tasks include: (1) Re-installing out of service pumps, (2) Changing fuel type codes, (3) Checking pump totalizer readings and others. Selecting **(3) Terminal Emulation for a Site** from the Utilities menu produces the same message as the Site Configuration functions produce. Press **[ENTER]** at "Select Site" prompt and choose Site To Update. Select YES to begin the procedure or NO to return to the UTILITIES menu.

9.4 DATA EXPORT

This utility lets you create an export file of fueling transactions from the Current Period Fueling Transaction file (CARDHOLD.DBF). The CARDHOLD.DBF file holds all transactions accumulated since the last use of the **Move Transactions To History** command (see Page 46). You can then import the CARDHOLD.DBF file into other software packages, like spreadsheets. This command lets you narrow the files exported by date, time, or site number.

Select **(4) Data Export** from the Utilities menu to display the screen shown in Figure 30.

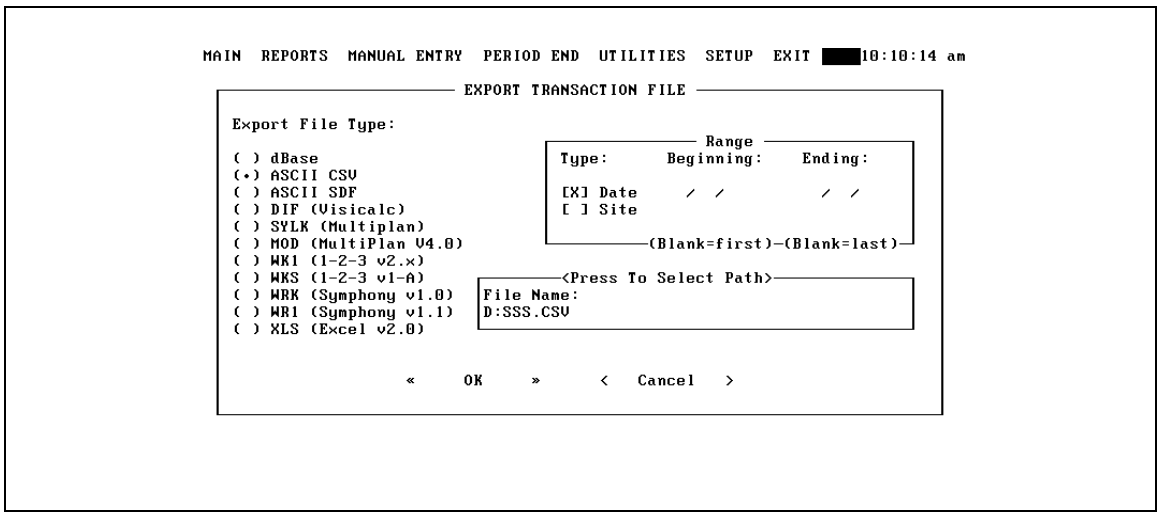


Figure 30 - Data Export Menu

NOTE: *If you do not specify a path, the export file is written to the PHOENIX directory.*

9.4.1 File Formats

Many export file formats are available. Below is a list of field definitions for the formats, including the Field Name in the CARDHOLD.DBF file, the type of field, the length of the field, and the field format.

Field	CARDHOLD.DBF Field Name	Field Type	Field Length	Format
Card #1	CHCARD1	Character	19	—
Card #2	CHCARD2	Character	19	—
Transaction date	CHTRANDATE	Date	8	YYYYMMDD
Transaction time	CHTRANTIME	Time	5	HH:MM (24-hour format only)
Transaction #	CHTRANNO	Character	4	—
Sequence #	CHDAYNO	Character	3	—
Site #	CHSITENO	Character	3	Right-justified, zero filled
Pump #	CHPUMPNO	Character	2	—
Fuel Type	CHFUELTYP	Character	2	Right-justified, zero filled
Quantity	CHQTY	Numeric	10, 3	##########.000 *(see note 1)*
Price	CHPRICE	Numeric	2, 5	##.00000 *(see note 1)*
Odometer	CHODOM	Numeric	6	###### *(see note 1)*
Miscellaneous	CHMISCKB	Character	10	—
Account #	CHACTNUM	Character	9	—
Account name	CHMISC1	Character	9	*See note 2*
Driver name	CHMISC2	Character	9	*See note 2*
Vehicle name	CHMISC3	Character	9	*See note 2*
Internal use	CHCONTYP	Character	9	—
Internal use	CHDTCONV	Date	8	—
Internal use	CHTIMECONV	Time	8	—
Receipt Issued	CHRECEIPT	Character	1	—
Manually-entered	CHMANUAL	Character	1	"Y" = Manual transaction
Internal use	CHUMEAS	Character	3	—
Internal use	CHTRNTYP	Character	1	—

NOTE 1: *All numeric fields are left zero suppressed.*
NOTE 2: *These fields hold the nine-digit name from the K2500 or System2 transaction.*

After selecting Data Export from the Utilities menu, select an Export File Type. The most common file types are listed in the menu; if your software type is not given, choose a type that your software recognizes as an "Import Type".

If you still can't find a match, use the ASCII type. Enter a date range for transactions to be exported, if desired. Finally, enter the name of the export file. Select OK to begin the export or CANCEL to return to the UTILITIES menu.

NOTE: *If no export directory is specified, the export files are written to the C:\PHOENIX directory.*

9.4.2 The ASCII CVS and SDF Formats

This section expands the definitions of two of the more common export formats: ASCII CVS format and the ASCII SDF format.

ASCII CVS FORMAT

This is probably the most common file format for export. The CVS format is a comma-delimited (separated) ASCII text file; each record ends with a carriage return (CR) and a line feed (LF) character. Since character data may include commas, character fields are intentionally separated with double quotation marks, as in the following example:

"JONES", 999999, "1992 VAN"

The above example includes two *character* fields ("JONES" and "1992 VAN"). As you see, they are separated from the numeric field (999999) with double quotes ("). The *numeric* field is separated with commas, because the numeric field cannot *contain* commas. A complete example using CVS format is shown below - all fields are used:

```
"0123456789012345","123456",19941214,"18:15","1234","123","123","1","12"
,10.000,1.9999,123456,"ABCDEFGHIJ","ACME OIL","JONES", "1992
 VAN","XXXXXX",12345678,"10:55","1","1","","
```

ASCII SDF FORMAT

The ASCII SDF (Standard Data Format) creates an ASCII text file in which all records have a fixed length. The SDF format has no field separators as in the CVS format. Each record ends with a CR (carriage return) and a LF (line feed). All files in the SDF format are automatically appended with the ".SDF" suffix (if you do not give the file name a suffix yourself).

9.5 CALCULATOR

A simple calculator (Figure 31) is provided for your convenience. Select **(5) Calculator** from the Utilities menu. Press **[ESC]** to return to the Utilities menu when you are done.

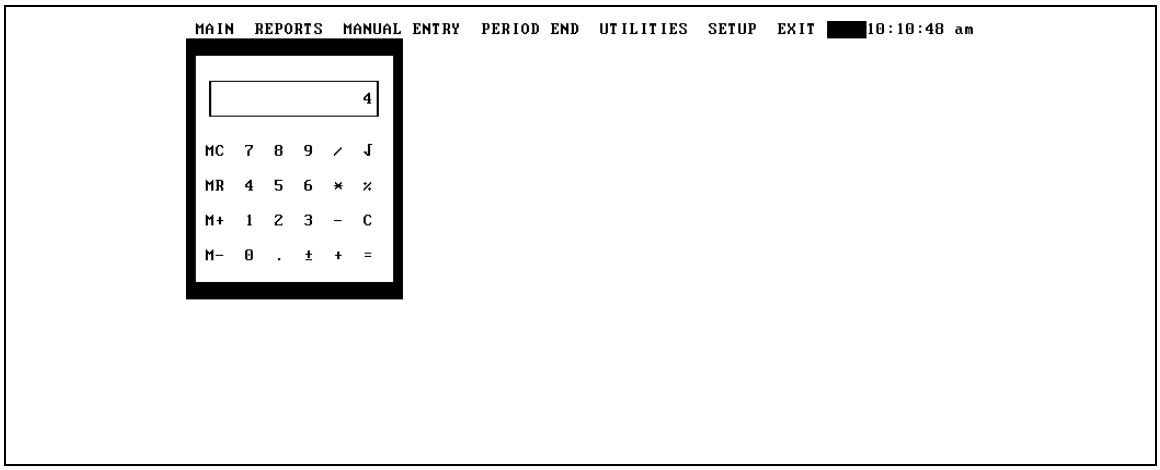


Figure 31 - Calculator

9.6 CALENDAR/DIARY

A simple calendar/diary program (Figure 32) lets you enter appointments or other information on a day-by-day basis. Select **(6) Calendar/Diary** from the Utilities menu. Notes can be stored for each calendar day. Press **[TAB]** to move from the calendar into the diary area of the screen. Use **[SHIFT][TAB]** to return to the calendar side. Press **[ESC]** to return to the Utilities menu.

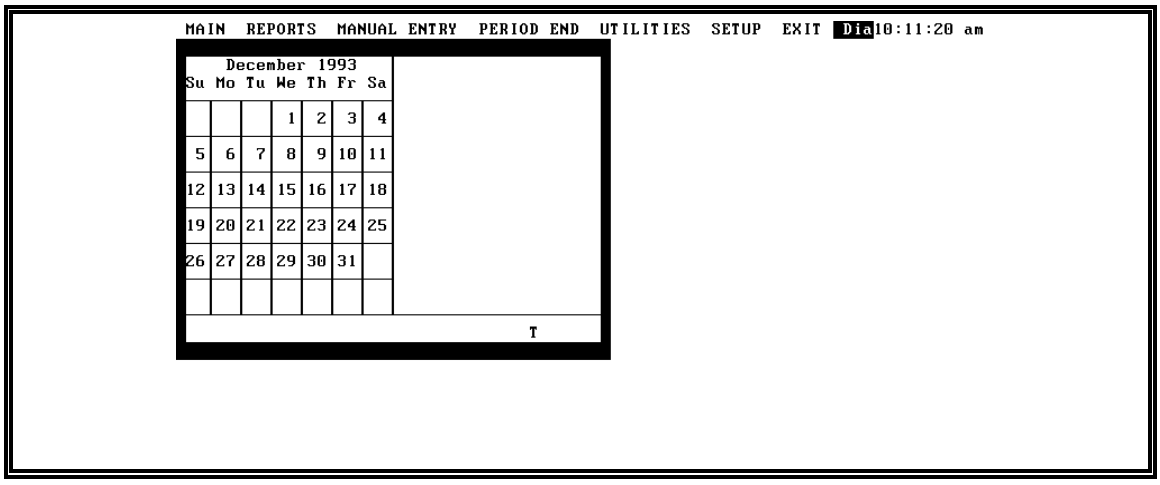


Figure 32 - Calendar/Diary

9.7 DOS SHELL

The DOS Shell selection allows you to exit out of ***Phoenix Plus*** to the DOS operating system while leaving ***Phoenix Plus*** in the computer's memory.

After selecting **(7) DOS Shell** from the Utilities menu, the ***Phoenix Plus*** menu will be replaced with the DOS prompt (typically **C:\PHOENIX:>**). To return to ***Phoenix Plus***, type **exit** at any DOS prompt.

9.8 EDIT TEXT FILE

Building an Autopoll command file requires the use of a DOS text editor. The Edit Text File function provides this capacity. This function is like using the "DOS TEXT" or "ASCII TEXT" feature of many word processors such as WordPerfect®.

Use the text editor to set up the communication parameters for command file execution (if they are different than the default parameters).

See Page 59 for more Autopoll information.

9.9 VIEW COMM LOG FILE

Use the View Comm Log option to view the results of the execution of a command file are recorded in a text file named "COMM.LOG". After selecting **(9) View COMM Log File** from the Utilities menu. An example appears below:

```
02-26-1994 / 08:16:49
File: seasite2
Result: Successful Completion
```

The date and time the command file was executed is recorded on the first line. The name of the command file is on the second line. The words "Successful Completion" or "FAIL" are shown on the third line. "FAIL" indicates the command file execution was terminated. If the command file was terminated, a brief reason for termination will be displayed on the fourth line. Example:

```
02-26-1994 / 09:30:15
File: CAP001.CMD
  Result: FAIL
Retry Errors in Capture
```

The COMM.LOG file should be deleted or erased regularly because the results of each Autopoll execution are appended to the file.

Appendix A
AUTOPOLL Operation

This appendix describes the AUTOPOLL communications program used to perform the capture of fueling transactions and card management functions within ***Phoenix Plus***. The details of the script language used by AUTOPOLL are described.

Because ***Phoenix Plus*** creates the communication scripts automatically, many users may not want to read this section, which is essentially reference material.

Experienced users who would like to modify the command files for extracting more information (from tank gauges, for example), might benefit from this section. Also, some unique card system communication or hardware setup might require that you to adjust a default parameter of some type.

A.1 SETTING UP COMMAND FILES

Instructions set up in the command (**.cmd**) files are the foundation on which the Autopoll program operates. Without careful implementation of these instructions, Autopoll will not function correctly. File names should relate to the device or function contained within the file. They should be followed by the extension "**.CMD**".

Example: **CAP001.CMD** would be the name of the command file for capturing data from SITE 1 in the ***Phoenix Plus*** program.

Building a command file requires the use of a text editor (MS-DOS Edit®, NE-Norton Editor®, or the editor supplied with ***Phoenix Plus***, see Page 58). You can also use the "DOS TEXT" or "ASCII TEXT" feature of any word processor such as WordPerfect®.

Using your text editor, you must first set up the communication parameters for the execution of each command file if they are different than the default parameters. As a default, Autopoll will use your PC's COM1 communications port with the following parameters:

Baud Rate	**1200**
Parity	**EVEN**
Data Bits	**7**
Stop Bits	**1**
No. of Retries	**3** *(this is number of data transmit attempts)*
Time Out	**45 seconds**
Trans Delay	**10 milliseconds**

To modify the default parameters, use the **SET** commands (See *Command File Definitions* on Page 62 for more command information).

IMPORTANT

Any SET commands must be the first commands in the command file. If the default parameters are correct, no SET commands are necessary.

After the SET commands, a dial command would typically be issued to the modem to call a remote site.

EXAMPLE: **SEND "ATDT12065557137"**

The ATDT is the dial command for a Hayes-compatible modem. This is followed by the site phone number. Often, the next command is a **WAITFOR** as shown in this example:

EXAMPLE: **WAITFOR "CONNECT".**

All Hayes commands are recognized by ***Phoenix Plus.***

Here Autopoll will halt command execution until "CONNECT" is received from the modem. Once "CONNECT" is received, the next command is executed.

The Terminal Emulation or Chat mode can be used to validate/invalidate cards, check daily pump totals, or review tank inventory levels:

Listed below are sample command files with explanations to help you better understand how to construct custom command files for your unique application.

SAMPLE 1

```
Filename: TALKTAC.CMD
SEND "ATDT12065557137"
WAITFOR "CONNECT"
CHAT
```

This sample illustrates sending the dial command to a long-distance number (206-555-7137); waiting until the text "CONNECT" is received, and then executing the CHAT command. The CHAT command allows you to send keystrokes directly to the remote device, then view responses from the device on the screen.

SAMPLE 2

The following command file lists a standard script to capture card system data using an external modem.

```
Filename: CAP001.CMD
MESSAGE "Preparing to capture transactions from Site #1"
MESSAGE "Initializing Modem..."
SEND "ATV1"
SEND "ATQ0"
PAUSE 1
SEND "ATDT5557137"
WAITFOR "CONNECT"
PAUSE 2
SEND ""
WAITFOR ">"
SEND "HELLO"
WAITFOR ">"
SEND "HELLO"
WAITFOR "WORD:"
SEND "HELLO"
WAITFOR ">"
PAUSE 2
MESSAGE "Warning...the next command ... clears the Card System's memory!"
CAPTURE FROM "K2500" TO "K2500.TRN" USING "CRC" AND "CLEAR"
PAUSE 2
SEND "BYE"
HANGUP
QUIT
```

The first **MESSAGE** command displays information to the operator. The next four commands program or initialize any Hayes-compatible modem to send result codes back in letter format. This insures that the **CONNECT** message will be sent to Autopoll from the modem after the phone number has been dialed and successfully answered by the modem at the remote site.

The **SEND** command instructs Autopoll to dial the site and **WAITFOR** a **CONNECT** to be received. The next **SEND** command is used to "wake up" the site. ***Phoenix Plus*** now waits for the normal status prompt from the card system.

HELLO is the default password for the privileged and restricted modes of the card systems.

Next, the **CAPTURE** command instructs Autopoll to request fueling transactions from the card system and to store these transactions in a **.TRN** file.

The **CRC** parameter requests error checking for each transaction. *This only works with non-bank-network versions of K2500/System2 software*. The **CLEAR** portion of the capture line requests that the card system erase the transactions from its memory. Autopoll instructs the card system to clear its memory through the date and sequence number of the last successfully captured transaction.

If too many transmission errors occurred during transmission, the entire command file is aborted and the **CLEAR** request is not issued.

A.1.1 Command File Definitions

Below are listed the default command files generated by ***Phoenix Plus*** that are used by Autopoll.

Bcxxx.CMD - backs up all the card data from a K2500 or System2 card system. Each site has its own file (site 1 would be BC001.CMD).

RCxxx.CMD - restores all the card data to a K2500 or System2 card system. Each site has its own file (site 1 would be RC001.CMD).

BSxxx.CMD - backs up the site configuration data from a K2500 or System2 card system. Each site has its own file (site 1 would be BS001.CMD).

RSxxx.CMD - restores the site configuration data to a K2500 or System2 card system. Each site has its own file (site 1 would be RS001.CMD).

CHATxxx.CMD - communications command file as run by the Terminal Emulation option under the UTILITIES Menu. Each K2500 or System2 site has its own file (site 1 would be CHAT001.CMD).

CAPxxx.CMD - captures the transactions from the card system and clears the transaction memory. Each K2500 or System2 site has its own file (site 1 would be CAP001.CMD). Captured transactions are stored in the **.TRN** file (from all sites).

A.1.2 Individual Command Definitions

Within each of the command files described in Section A.1.1 are individual commands that perform the actual functions such as backup, restore, or capture. This section describes the currently active commands in your Autopoll program. If the command requires entry of a variable, the entry should be placed between double quotes (example: MESSAGE "Dialing Site"). A space is also required between the command, and the text or variable contained by the quotes.

BACKUP FROM "K2500" TO "filename" - backs up all the card data from the card system to the file specified by "filename". This file is automatically chosen by ***Phoenix Plus*** based on the site number.

CAPTURE FROM "device" TO "filename" - invokes a standard capture routine for the K2500 or System2 card systems. The capture routine requests all fueling transactions from the device specified and stores those transactions in the file specified by the "filename" parameter. This file is automatically chosen by ***Phoenix Plus*** based on the site number.

USING "CRC" - requests Autopoll to check each transaction for accuracy using the checksum feature of the card system. If data does not pass the checksum calculation, Autopoll will request a retransmission for up to 3 times (or the number of tries specified by the **SET RETRIES** command). If the data is still not captured successfully, Autopoll restores the destination file to its original state, aborts further execution of the command file, and does not clear the card system memory if the **CLEAR** option was requested (see below).

AND "CLEAR" - this option will request the card system to clear or erase its transaction memory through the last successfully captured transaction. It is recommended that this option be used with "CRC" option described above.

CHAT - tells Autopoll to go into terminal emulation mode, allowing you to issue commands to the K2500 or System2 card systems and view the card system responses.

HANGUP - issues commands to any Hayes compatible modem to disconnect the phone line.

LOGOFF - halts the logging of data to the file specified in **LOGON** command.

LOGON "filename" - captures any incoming data and stores the data in the file specified. LOGON is commonly used to store inventory or leak detection reports from an electronic tank gauge to a disk file for later printing (example: **LOGON "TANKINV.RPT")**.

MANUAL - Enter this word at the beginning of the command file to prevent the file from being automatically modified by the program.

MESSAGE - puts all characters between double quotes. This command is often used to document to the operator the progress of the Autopoll during the execution of the command file (example: **MESSAGE "Now dialing the Main St. cardlock site")**.

PAUSE - causes the system to pause the specified number of seconds before the next script is executed. This ensures that the card system has time to respond before the next command is given.

QUIT - normal termination of the command file. Usually appears at the end of the command file script.

RESTORE TO "K2500" FROM "filename" - restores all the card data to the Petro Vend K2500 *or* System2 card system from the file specified by the "filename" parameter. This file is automatically chosen by ***Phoenix Plus*** based on the site number.

SEND - transmits data contained within the double quotes to a remote device followed by a carriage return/line feed (example: **SEND "HELLO"**).To send ASCII characters, enclose the characters in brackets. For example, to send an ASCII CR (carriage return), enter **SEND [13]**.

SETCOMM - sets the communication parameters for the communications port on the computer if other than the default parameters are required (example: **SETCOMM "com2:2400,e,7,1"**). Note that all of the parameters must be given, even if you are changing only one!

SET RETRIES TO "x" - sets the number of times Autopoll will request the retransmission of data before giving up. This command is only applicable if the **USING "CRC"** option was used with the CAPTURE command. If the CRC check fails during the CAPTURE, Autopoll will request the data to be sent again. Default is three retries; maximum is 9.

SET SITE TO "xxx" - writes out the number specified by the "xxx" as the first record in the destination file. Incorporated into the CAPxxx.CMD file, **SET SITE** can be used to distinguish the transactions from different cardlock sites or locations. Range is 1 to 999.

SET TIMEOUT TO "xx" - if no response is received within "xx" seconds following a WAITFOR command, Autopoll will abort the execution of the command file. Default is 45 seconds; maximum is 99 seconds.

SET TRANSMISSION DELAY TO "xx" - allows the operator to slow the time between the sending of each character to the remote device. The delay is measured in tenths of a second; for example, to increase the delay to 1 full second, the command would be: **SET TRANSMISSION DELAY TO 10.** Maximum is 99 tenths, or about 10 seconds.

SYSBACKUP FROM "K2500" TO "filename" - backs up the site configuration data (pump parameters, messages, etc.) from the card system to the file specified by the "filename" parameter. This file is automatically chosen by ***Phoenix Plus*** based on the site number.

SYSRESTORE TO "K2500" FROM "filename" - restores the site configuration data (pump parameters, messages, etc.) from the file specified by the "filename" parameter to the card system. This file is automatically chosen by ***Phoenix Plus*** based on the site number.

WAITFOR "." - causes Autopoll to wait until text contained within double quotes is received before executing the next command in the command file (example: **WAITFOR "CONNECT"**). The number of seconds Autopoll will wait before aborting is controlled by the **SET TIMEOUT** command.

COMMENTS: You can add comments to command files for documentation or to improve readability. Any comment must start with an asterisk - '*'. Any text following an asterisk will be ignored by Autopoll (example: **SEND "ATDT5557137" *send phone number for site**).

A.2 COMMUNICATION LOG FILE

The results of the execution of a command file are recorded in a text file named "COMM.LOG". An example appears below:

```
02-26-1994 / 08:16:49
File: seasite2
Result: Successful Completion
```

The date and time the command file was executed is recorded on the first line. The name of the command file is on the second line. The words "Successful Completion" or "FAIL" are shown on the third line. "FAIL" indicates the command file execution was terminated. If the command file was terminated, a brief reason for termination will be displayed on the fourth line. Example:

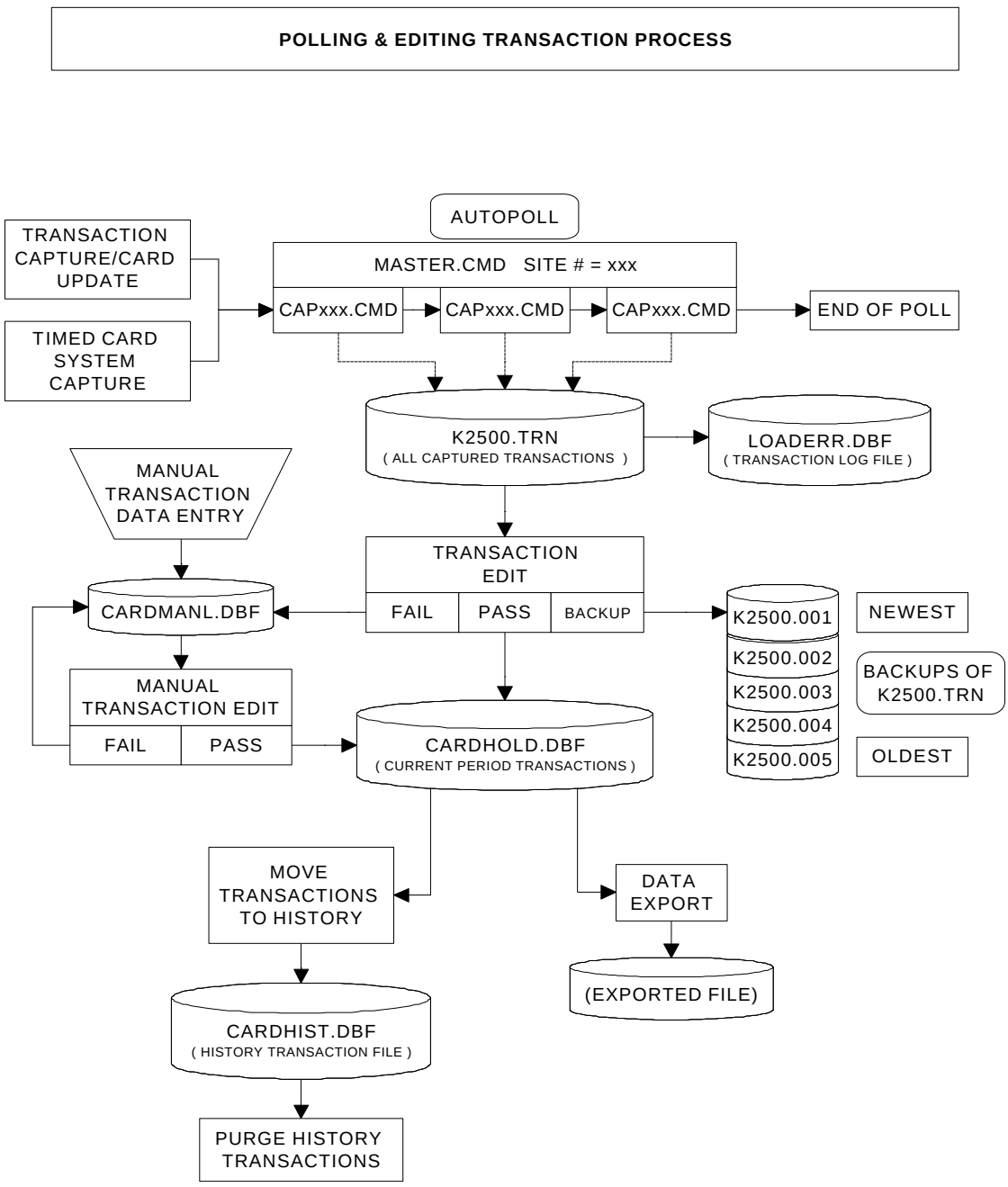
```
02-27-1994 / 09:58:45
File: CAP001.CMD
Result: FAIL
Retry Errors in Capture
```

To view the communication log, use the View Comm Log option in the Utilities menu (see Page 58).

The COMM.LOG file should be deleted or erased regularly because the results of each Autopoll execution are appended to the file.

Notes:

Appendix B
Transaction Polling/Editing Process



Notes:

Appendix C
Phoenix Plus Odometer Tracking

The CARD.DBF table contains fields for tracking the starting odometer reading for each of the 12 months for both current and prior years. This is a total of 24 fields. There is also a 13th field used as a "scratchpad" for temporarily holding the starting and ending odometer readings for January of the next year until End Of Year Process is completed.

When transactions are processed, the odometer reading for the transaction is written to the field which corresponds to the month AFTER the month of the transaction. See the sample Activity Report, Figure C1 on the next page. You can see the odometer reading for the transaction (26812) was written to the MAY field because the transaction took place in April. This is in Figure C2, Sales History details, on the following page.

Each transaction overwrites any existing odometer reading. Transactions should therefore be brought into the system in chronological order, so that the odometer field always contains the last known odometer reading for a specific card.

When the Year End Process is run, the 12 odometer fields for the current year are written to the Prior Year fields. The Current Year fields are cleared, and the scratchpad fields for the Next Year are transferred to the Current Year January fields.

When the Activity Report (Figure C1 on the next page) is run, the odometer fields are used to compute miles per gallon (MPG) details for the report. For each transaction in the report, an odometer reading is chosen for MPG calculations as follows:

- ❏ If prior transactions for the current card exist in the current period transactions file (CARDHOLD.DBF), the odometer reading for the transaction immediately before the current one will be used to calculate miles traveled and MPG.

- ❏ If the current transaction is the first one for the current card, the system will take the odometer reading from the CARD.DBF file using the month that corresponds to the month of the current transaction. In Figures C1 and C2, there is only one transaction in the CARDFHOLD.DBF file, so the starting odometer is taken from the APRIL field from the CARD.DBF record belonging to card 42324.

The odometer for the first transaction is the card stored in a variable to be used to calculate the average MPG for the card. After the last transaction for the card is printed, the system will subtract the odometer for the first transaction from the odometer for the last transaction to determine the total miles traveled for the report, and the average MPG.

```
                          ACTIVITY REPORT
                      PHOENIX CARDLOCK SOFTWARE

                  DATE RANGE FROM BEGINNING TO ENDING

ACCOUNT:   50
           ACME PETROLEUM COMPANY
           PO BOX 999
           1234 OIL DRIVE
           UNION CITY, NJ 99999

-------------------------------------------------------------------------
LOCATION    DATE  TIME    MISC KEYBD   ODOM   MPG    PROD   QTY    PRICE  AMOUNT
-------------------------------------------------------------------------
CARD1: 99999              B.A. SPORT   26509
SOUTH DOCK                             26812  20.2   UNL    15.000 1.15   17.25

           CARD1 TOTALS:         303 MILES @ 20.2 MPG AVE 15.00   17.25

-----------------------------SUMMARY-----------------------------------

PRODUCT                                          TOTAL        AVERAGE      TOTAL
                                                 QUANTITY     PRICE        AMOUNT
-------------------------------------------------------------------------
UNLEADED GASOLINE                                15.000       1.150        17.25

                                                 ------                    -----
                                                 15.000                    17.25
```

Figure C1 ACTIVITY REPORT

```
                           CARD 1 SALES HISTORY
             ACCOUNT NUMBER: 0001      ACCOUNT NAME: OILCO INCORPORATED
-------------------------------------------------------------------------

DRIVER:      42342
DESCRIPTION: BILL E. BOB
-------------------------------------------------------------------------
             DOLLARS      GALLONS      ODOMETER     MILES   COST/MI     MI/GAL

JANUARY      0.00         0.0          0            0       0.000       0.0
FEBRUARY:    0.00         0.0          0            0       0.000       0.0
MARCH:       0.00         0.0          0            26509   0.000       0.0
APRIL:       17.25        15.0         26509        303     0.057       20.2
MAY:         0.00         0.0          26812        0       0.000       0.0
JUNE:        0.00         0.0          0            0       0.000       0.0
JULY:        0.00         0.0          0            0       0.000       0.0
AUGUST:      0.00         0.0          0            0       0.000       0.0
SEPTEMBER:   0.00         0.0          0            0       0.000       0.0
OCTOBER:     0.00         0.0          0            0       0.000       0.0
NOVEMBER:    0.00         0.0          0            0       0.000       0.0
DECEMBER:    0.00         0.0          0            0       0.000       0.0
FUTURE:                                0

TOTALS:      17.25        15.0                      26812        0.001 1787.4
```

Figure C2- Card Sales History

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Notes:

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