## Profile Plus

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Profile Plus Program:
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## Introduction

Profile Plus is a unique new program that not only transforms your TRS-80 ${ }^{\circ}$ Model II into a well-organized filing system, but offers practically endless possibilities for manipulating the data you enter. You can store almost any type of information, then retrieve it at the touch of a key.

In Profile Plus, your data bases can be customized to fit your every need. You set up data segments that contain individual records and choose your own categories for "searching" through them. Conventional filing systems can only be set up in one order-for example, in alphabetical or numerical order. With Profile Plus, you can index your data, using up to 36 different sort criteria per data base that you define.

You can create up to five different screen layouts for each of your data bases. This lets you enter and display the data in several ways, to provide general and specific information.

Profile Plus will perform addition, subtraction, multiplication, and division, so that you can keep records on file involving dollar amounts or other totals. You can even recalculate totals automatically.

Once your data bases contain data, you can use Profile Plus to print customized reports and mailing labels, or (in conjunction with SCRIPSIT ${ }^{\text {TM }}$ for Model II) compose form letters, inserting personalized information from Profile Plus wherever desired.

Profile Plus offers security for your data. You can create custom Menus, then a password protects parts of your data base so that only authorized persons can access them.

Profile Plus is easy to learn and use. You'll find more and more ways to apply Profile Plus as you learn its capabilities and many uses.

Hereafter, the Profile Plus program will be referred to as Profile+.

## Features

- Quick access to individual records or groups of records.
- Up to 99 categories in each record.
- Up to 36 search categories (defined by you) in each data base.
- Up to five different screen formats for each data base.
- Prints up to five different user-defined reports for each data base.
- Prints up to five different user-defined mailing labels for each data base.
- Stores from 300 to 20,000 records utilizing floppy diskettes, and up to 64,000 records utilizing a single hard disk.
- Can be used with Model II SCRIPSIT to compose special letters and reports (with an additional disk drive).
- Allows high speed access to records in data bases by using a special Index feature.
- Clustering of associated fields into search groups.
- Performs addition, subtraction, multiplication, and division with Math Package.
- Mass recalculation of totals for all or selected records.
- Password protection of displays and reports for security.
- Lets you create a customized Menu for ease of operation.


## Equipment Requirements

The minimum equipment required for running Profile+ is:

- TRS-80 Model II 64 K Computer
- A Radio Shack Printer, capable of 132 columns per line
- Printer Cable

Note: Profile+ can also be used with 80 column printers by limiting the width of your print files.

## How to Use the Manual

This manual is divided into several sections designed to give you a complete picture of the Profile+ system. Some sections of the manual are for inexperienced users, and other sections are for those who are thoroughly familiar with Profile+.

The first section gives you a broad look at Profile+. It contains information about the equipment required to run the system and instructions on preparing diskettes for use. Also included are explanations of some basic program functions and notes on some of the special keys used by Profile+.

The first part of the second section leads you through the fundamental operations of Profile+. You will learn Profile+'s capabilities by setting up a sample data base with data we provide. You'll learn how to use these basic features to make Profile+ conform exactly to your needs. You will find this part of the section especially helpful in acquainting you with the many possible applications of Profile+ techniques.

After you have studied the basic features of Profile+, the second part of the second section will demonstrate advanced features and principles, using the sample data. Once you are moderately familiar with the system, you should be able to refer directly to this part of the section for help with the more complex operations of Profile+.

The third section of the manual is for those who are thoroughly familiar with Profile+. It contains a short description of each of the features of Profile+ for reference purposes.

The last section of the manual contains the appendices and a glossary of unfamiliar terms.

We suggest that you experiment with Profile+ as you learn its several uses. Enter the sample data provided, and by the time you've reached the end of the manual, you'll be able to use Profile+ to organize and retrieve nearly any type of information you wish.

Following the example provided will take you approximately eight hours. Once you have used this as a "training course" in Profile+, you will be able to rapidly set up your own data bases and use them to fit your most specific needs.

## Before You Start

Before you begin running the program, there are a few terms that should be defined:

Character A character is the smallest unit that can be entered. $5, \$$, A, J are all characters. Spaces (shown as ) also count as characters.

Field A field is a group of related characters containing information. Think of a field as a line on the paper that will be filled with information or a blank to be filled in.

Field Name Is the name of a field. It is simply an identifier. Category names such as Name, Address or Phone would be field names. A field name may also be referred to as a Heading.

Field Data This is the information that will go into a specific "field". John Doe would be the data that would be entered under the field name "Name".

Record A record is a group of related fields.
"John Doe
1111 Main
Anytown, USA" would be a record.
File A file is a group of physically related records. A Name and Address file might be:

| John Doe | Jane Doe |
| :--- | :--- |
| 1111 Main | 1112 First |
| Dothan, AL. | Kittyhawk, NC |
|  |  |
| John T. Smythe | Barney Rubble |
| 2323 18th Street | 2432 Flint Street |
| Detroit, MI. | Bedrock, USA |

Key Field A field that can be used to select or sort records. In Profile+, any field in the first segment is a Key Field.

Segment The part of the record that Profile+ will hold as a separate unit on the disk.

Data Base In Profile+, a data base is a collection of information. Profile+ builds its data bases in four file segments. You create a physical organization of this information when you define segments and their respective fields.

## Using Diskettes

Before you use Profile+, you need to know a few basic instructions about diskettes and how to use them.

## Loading the Master Diskette

The diskette supplied with Profile+ is your Master diskette. This diskette is never used to run the program, only to make copies. These copies (or Backups) will be used in actually running Profile+. The first step in using Profile+ is loading the Master diskette. Follow the instructions below exactly.

1. Turn on the TRS-80 Model II Computer (the switch marked POWER on the front of the computer). Turn on the Printer and Expansion Disk Drives (if any).
2. Press the light bar on the disk drive door to open it.
3. Insert the Profile+ Master diskette in Drive 0 (the disk drive built into the Computer). You will feel the diskette click into place.
4. Close the door of Drive 0 firmly.


The screen will show:
INITIALIZING

Enter Date (MM/DD/MYYY)

Enter Time (HH.MM.SS)
TRSDOS READY

You will type:
Press the Printer's ON LINE button or PRINT switch (if it has one).

Type today's date and press (ENTER. (You must enter a four digit year.)

## Press (ENTER.

Press the CAPS key once. The red light built into the key will turn on.

## Backing Up the Master Diskette - Single Drive Systems

If you have more than one disk drive, go to the next section. Hard Disk Users should refer to the Save and Restore instructions in the Hard Disk Owner's Manual to make Backups. Remember, you will never use the Master diskettes to run Profile + .

You must make a Backup copy to run the system. We will assume that TRSDOS READY is showing on your screen and that the diskette supplied with Profile+ is in Drive 0. If you are using only one disk drive, follow this procedure:

The screen will show:
TRSDOS READY

TRS-80 Model II Diskette Formatter Vers 2.0 Format WHICH Drive?

Mount Diskette for Formatting on
Drive ØContinue? (Y/Q)

## You will type:

$$
\begin{aligned}
& F(F)(A)(M)[T) C D C A C L T T \\
& =(D C D \text { and press ENTER. }
\end{aligned}
$$

Place a blank diskette (or a diskette you wish to reuse) in Drive 0. The notch in the diskette must be covered by a piece of gummed foil tape. Type $Y$ and press (ENTER.

If you are using an old diskette, the screen will show:

> Diskette CONTAINS DATA; Format OVER it? (Y/Q).

To keep the data contained on the diskette, enter (a) and start over, using another diskette. Otherwise, enter (Y).

The Computer will begin formatting the diskette (preparing it to hold information). This process takes a few minutes. During the formatting procedure, the Computer will format and verify each track and sector on the diskette, displaying the information on the screen.

When the process is finished, the screen should show:

> 00 Flawed tracks
> System tracks now being written to the diskette
> Insert SYSTEM diskette Press ANY key to continue

If there are any flawed tracks, the diskette must not be used. Try erasing the diskette and reformatting it. If the format was successful, remove the newly formatted diskette from Drive 0 and replace it with the Master diskette. Press any key, and TRSDOS READY will appear.

You have prepared the new diskette to hold information. Now, you must copy all the information from the Master diskette to the formatted blank diskette.

The screen will show: You will type:
TRSDOS READY
$[B](A)(C)(K)(U)(P)$ and press ENTER.

TRS-80 Model II Backup Utility
Vers 2.0 Source drive number? ( $0-3$ ) and press (ENTER.
Destination drive number (a-3) and press (ENTER.
Source Diskette Ready? ( $Y / Q$ ) $Y$ and press (ENTER.
The Source diskette is your Master diskette. The destination diskette is the one you just formatted.

The screen will show:
Reading Boot Track
SYSTEM/SYS
Insert Destination diskette - press ANY key to continue
The word DESTINATION will be blinking. Remove the Program diskette from Drive 0, replace it with the formatted diskette, and press any key.

The screen will show:
Change Diskette Information?
Type (N and press ENTER.
The screen will tell you to insert the Source diskette in Drive 0. You will alternate between placing the Source diskette and the Destination diskette in Drive $\emptyset$ several times. As you do this, the screen will show the names of the programs that are being copied from one diskette to the other. The Computer is taking some of the information from the Source diskette and holding it until you place the Destination diskette in Drive 0 .

If you get the diskettes switched around and try to place the wrong one in Drive $\emptyset$, the screen will show:

> WRONG diskette - press ANY key to continue

Put the right diskette in Drive 0, press any key, and continue.

## Using Diskettes (continued)

When the Backup is finished, the Destination diskette will be in Drive 0 .
The screen will show:

28 Files Examined, 28 Files Copied<br>00 Files Deleted, 00 Files Defective<br>Writing Directory Track<br>Backup Complete<br>TRSDOS READY

Place the Master diskette in its protective sleeve and store it in a safe place, such as a metal file cabinet. This diskette is your Master diskette for preparing additional copies in case of system failure.

After you have filed the Master diskette, mark the new diskette as your Working Copy of Profile+, and use it to run the system.

## Backing Up the Master Diskette-Multi-Drive Systems

If you are using more than one drive with your Computer, follow these instructions for making a Backup of your Master diskette. We will assume that TRSDOS READY is showing on your screen and that the Master diskette is in Drive 0.

The screen will show:
TRSDOS READY

TRS-80 Model II Diskette Formatter Vers 2.0 Format WHICH Drive?

Mount Diskette for Formatting on
Drive 1 Continue? ( $\mathrm{Y} / \mathrm{Q}$ )

You will type:
 $=[$ (D) $]$ and press ENTER).and press ENTER.

Place a blank diskette (or a diskette you wish to reuse) in Drive 1. The notch in the diskette must be covered by a piece of gummed foil tape. Type $Y$ and press (ENTER).

If you are using an old diskette, the screen will show:

Diskette CONTAINS DATA; Format OVER it? (Y/Q).

To keep the data contained on the diskette, enter (Q) and start over using another diskette. Otherwise, enter $(Y$.

The Computer will begin formatting the diskette in Drive 1. This process takes a few minutes. During the formatting procedure, the Computer will format and verify each track and sector on the diskette, displaying the information on the screen.

When the process is finished, the screen should show:

00 Flawed tracks
System tracks now being written to the diskette TRSDOS READY

If there are any flawed tracks, you must erase the diskette and try again, or use a new blank diskette. Do not use a diskette that has flawed tracks. After the diskette is formatted, TRSDOS READY will reappear.

You now have one formatted diskette ready for use. To format more diskettes for storing information, you can place another diskette in Drive 1. Close the drive door, Type $(A)(G)(A) C I)[N$, and press (ENTER). The Computer will automatically reinitiate the format procedure.

When you are finished, you should have no more than four formatted diskettes. Leave the last diskette in Drive 1 after the format process is completed.

You have prepared the diskette in Drive 1 to hold information. Now, all the information from the Master diskette must be copied to the formatted blank diskette.

The screen will show: You will type:
TRSDOS READY
(B) $(A)(C)(K)(U)(P)$ and press ENTER.

TRS-80 Model II Backup Utility
Vers 2.0 Source drive number? ( $\theta-3$ ) $(\theta$ and press ENTER.
Destination drive number? ( $0-3$ )
(1) and press (ENTER).

Source Diskette Ready? (Y/Q)
(Y) and press (ENTER).

The Source diskette is your Master diskette. The Destination diskette is the one you just formatted (in Drive 1).

The screen will show:
Reading Boot Track
SYSTEM/SYS
DESTINATION Diskette Ready? (Y/Q)
Type $(Y$ and press (ENTER).
The screen will show:
Change Diskette Information?
Type (N) and press ENTER.
The Computer will begin taking information from the Source diskette and copying it onto the Destination diskette in Drive 1. The screen will show the
names of the programs that are being copied from one diskette to the other. When the Backup is finished, the screen will show:

## 28 Files Examined, 28 Files Copied

00 Files Deleted, 00 Files Defective
Writing DIRECTORY Track

## Backup Complete

TRSDOS READY
Remove the Master diskette from Drive $\mathbb{Q}$, place it in its protective sleeve, and store it in a safe place (such as a metal file cabinet). This is your Master diskette for preparing additional copies in case of system failure.

After you have filed the Master diskettes away, remove the new diskette from Drive 1 and mark it as your Working Copy of Profile+. Use this diskette to run the system.

Mark your other diskettes as Data diskettes, and use them to store information you enter in Profile+, rather than storing the information on your working diskette.

## The Directory

The Directory is the list of programs stored on your Profile+ diskette. It lists all files contained on the diskette, their dates of creation, and the amount of diskette space they use. You can see the Directory for Profile+ by following this simple procedure.

Make sure that your working diskette is properly inserted in Drive 0. When TRSDOS Ready is displayed, type (D) I (B) and press ENTER.

To freeze the display, press HOLD. Press HOLD again to display the rest of the Directory. At the end of the listing, TRSDOS Ready is displayed.

Appendix B contains a list of the Program and data files in the Profile+ Directory. It explains the function and the file (or data base) information that each file holds.

You may list the Directory any time TRSDOS Ready is displayed.

## Special Keys in Profile Plus

Throughout Profile+, you'll find explanations of special keys (on the computer keyboard) that have functions other than making their characters appear on the screen. There are even a few keys that have several different special functions, depending upon which part of Profile+ you are using.

These special keys will be discussed as they become applicable. As an aid, there is an Appendix at the end of the manual (Appendix A), listing the special keys and their functions. Once you are familiar with Profile + , you can refer directly to this Appendix, rather than searching through the manual.

## Type-Ahead

Profile+ lets you respond to the prompts before they appear on the screen (assuming that you are familiar with the program).

You may continue to enter keystrokes while the machine is performing other operations. The exceptions are in entering the Update Mode and during Select Records. At this time, all previous keystrokes are cleared.

For example, once you have the Menu displayed on the screen, if you know that you want Option 1, and you know that the next prompt will ask you for the name of your data base, etc., you can press (1) and then, (while the program is locating 1 on the disk), you can type the name of your data base.

You will not see the information appear on the screen immediately, but the program is accepting the input. Be careful not to cause password violations while using this type-ahead feature.

## Starting Up Profile Plus

To start using Profile+, first make sure that your working copy of the Profile+ diskette is in Drive 0. TRSDOS READY must be displayed on the screen. To start using Profile+ on the hard disk, TRSDOS-HD READY must be displayed on the screen. If you are using multiple disk drives, insert your data diskettes in the Expansion Unit drives.

Type (M) and press ENTEA).
The screen will show:


This is the main program menu, called the Profile II Menu of Profile+. Hereafter, this Profile II Menu will be referred to as the Menu. This Menu lists several options that are the starting points for Profile+.

Here is a brief explanation of each Menu selection:
Ø - Profile Directory - Use this selection to see the name of all data bases you have created with Profile+.

The next six selections let you set up and design layouts for your data bases:
1 - Define Data Formats - This selection lets you define the types of data you will store.

2- Define Screen Formats - Use this selection to design the layout of screens which will prompt you for data.

3 - Define Report Formats - Use this selection to design the layout of data when it appears on a printed report.

4 - Define Label Formats - Use this selection to design the layout of data when it appears on a printed label.

5 - Define Selection Formats - Use this selection to tell Profile which data to include when utilizing the Merge option in Model II SCRIPSIT.

6 - Expand Existing File - Use this selection to make room for more records in your data base.

The next seven selections let you enter and manipulate data, call the Profile + Menu, call your user-defined menus, or exit the Profile+ program.

7 - Inquire, Update, Add - Use this selection to review, delete, add, or edit records in your data base.

8 - Print Reports - Use this selection to produce reports about data in your data base.

9 - Print Labels - Use this selection to produce labels from information in your data base.

10 - Select Records - Use this selection to choose records from your data base for use with Model II SCRIPSIT.

+     - Profile + Menu - Use this selection to access the advanced features menu of Profile+.

U - User Menu - Use this selection to access customized menus which let you bypass initial keyboard entries in Profile+.
$X$ - Exit - Use this selection to exit Profile+ and return to TRSDOS READY (TRSDOS-HD READY).

To make a selection from the Menu, simply press the number or letter next to the selection you want.

As we go further into Profile+, these selections will be discussed in more detail.

## Setting Up a Data Base

We will use a sample company to show the different capabilities of Profile+ you can use to make your data bases efficient and personalized to meet your exact needs.

Our sample company markets three sets of encyclopedias. More about the company will be explained as we go through the program. Some of the operations that you will perform in the beginning sections will not be fully explained until you reach the more complex sections. These operations must be completed in these earlier stages, or you would have to start over to see the more advanced features of Profile+.
(All of the printouts and formats for the company not shown in the tutorial section of this manual are shown in Appendix C).

## Defining Data Formats

A data format tells Profile+ the information categories that will appear in your data base. The structure of your data requires careful planning and organization before you begin entering data. The planning for the data base that you are about to create has been done for you. Tips concerning this planning will be found in Section III.

There are several steps in creating your data base that are not correctable. If you don't create your data base correctly, you must start over from the very beginning.

At the Menu, press (1).
The program is prompting for a data base name. This data base will contain information on the company's salesmen.

Type: $S$ (A)L (E)SCMCECN.
There are eight spaces available for data base names. This name must be one word; no blank spaces between letters. We used all eight spaces in SALESMEN, so the program advanced to the next prompt. If you use shorter names for your own data base (to avoid constantly entering a long name), you must press (ENTER) after typing the name.

Note: You can use capitals and lowercase if you prefer (by pressing the (CAPS key once - light off). If you use lowercase letters for the names, you must remember that the program requires capital letters in response to any program prompts.

The program is prompting if the name is new. Press $\subset \bar{\gamma}$. From now on, this question will not appear when you work on the SALESMEN data base.

If you make a typographical error or decide you would like to name a data base differently (if you are just creating one), press ( $N$ ) to this prompt. You will be asked to enter the data base name again.

The screen now shows:
File Currently Contains $\emptyset$ Segments
Enter Segment \# (1-1)
A segment is made up of a set of related fields that contain data. In Profile+, a segment is a group of fields. One segment might contain name, address and phone number fields, while another could contain a spouse name and a hobbies field.

## Defining Data Formats (continued)

You can have up to four segments in each data base. This lets you spread the data (in segments) over four disk drives. The first segment is the most important. The fields you enter into Segment 1 (the Key Segment) can be used later as search and sort categories to retrieve individual records. Segments 2 through 4 are strictly the data segments.

SALESMEN does not contain any segments at this point. You can only enter Segment 1. Later, when you have defined other segments, the numbers in parentheses will change to let you access any segment you have defined or let you create a new one (if you have not reached the four segment limit). For example, with two existing segments in a data base, the parantheses will show: (1-3), which means you can access Segment 1 and 2, or create a Segment 3.

## Defining Segment 1

Press (1).
The screen will show:
This is a New Segment ...
Enter Drive Number of Diskette To Hold The Data.
Each time a segment is defined, this prompt will appear. If you plan to store data on a disk in an external drive (1-3), you must have a formatted data diskette in the drive you specify.

For SALESMEN, we'll store all information on the program diskette in Drive $₫$. Press (b). (For hard disk users, Drive 4 will be used. Press (4).)

The screen will show:


The first line of information on your screen shows the number of fields available in Segment 1.

The second line tells you that you have 85 character spaces available for data. A field might be allotted 15 character spaces to hold data. You would then have 70 spaces remaining for the other data fields in this segment.

The third line tells you that you have 201 characters for headings. A field heading is used to name or describe the field. For example, "Last Name," "Amount," "Date" would be field headings. "Jones," " 50.00 ," "06/07/82" would be the actual field contents.
"Last Name" would be a field heading using nine character spaces (the space between the words counts as one character). Each field heading uses an additional two characters for control information. A total of eleven characters would be subtracted from the available heading space.

As you become more familiar with the program, these numbers and the allocation of data space will become clear to you.

Remember that only Segment 1 can be used as keys to sort or access data. Our records need to contain a salesman's name, address, position, etc. We don't need address as a key field (i.e. arrange addresses by street number), so we won't include it in Segment 1. Before you set up your data bases, you need to carefully decide which data is appropriate for use as key fields.

Follow the remaining instructions for setting up the SALESMEN data base carefully. The program tells you to enter a field heading. This is the beginning for setting up a data base. At the left of the screen is the number 01 (for Field Heading 01). In the center is space for the first category name.

Our first heading will be the salesman's district. Type: District and press ENTER.

Next, you are asked for the field length - the number of spaces you want available (for data) in this category. For this practice session, type $\triangle(D)$ and press (ENTER).

Notice that the number of characters used for the first field have been subtracted from the "space available" numbers at the top of the screen. Each time you enter a field heading and field length, these numbers change to show the remaining amounts of available space.

Enter the following data for the designated fields:
Note: We recommend capitals and lowercase here. (Press the CAPS key once to turn the light off.)

| Field \# | Field Heading | Max Field Length |
| :--- | :--- | :---: |
| 01 | District | 10 |
| 02 | Position | 10 |
| 03 | Last Name | 15 |
| 04 | LB Set | 4 |
| 05 | DH Set | 4 |
| 06 | H Set | 4 |
| 07 | Sales By Unit | 10 |
| 08 | Sales By Amount | 10 |
| 09 | Commission | 10 |

After you have entered the data for Field 09, press (ENTER). The data will be stored and you will return to the Menu. If you use all the available data space, you do not need to press Enter after the last field. The data will be stored and you will return to the Menu automatically.

If you have mistyped a field (or to change something while you're working on a new segment), press BREAK twice. Profile + will act as though the segment had never been created. Once you store a segment, the only way to change it is to use the Replace function, available in reviewing a segment.

## Reviewing Segment 1

To review the first segment of SALESMEN, press (1) at the Menu. Type the data base name, and press (1) to see the list of fields defined for Segment 1. (Remember to turn the (CAPS key back on.)

The abbreviations you entered for fields $₫ 4$ through $\emptyset 6$ are for the three products the company markets. These are: 1) Library Set, 2) Deluxe Home Set, and 3) Home Set.

The Sales By Unit field is to record the number of volumes (or books) each salesman has sold (each set has a different number of volumes).

Sales By Amount is to record the dollar amount of the merchandise the salesman has sold. Commission will record the salesman's commission on the sets.

Notice the bottom of the screen. You have five choices:
H - Hardcopy - Press [H] to print a list of all defined fields in the segment.
R - Replace - Press (A) to redefine data formats. Pressing (A) will erase everything you've entered for a segment, and let you begin again.

A - Add Fields - Press (A) to add more fields and headings to your data formats. You can only add fields if you have available characters left, otherwise you will return to the Menu.

BREAK - Exit - Press BREAK and a flashing message, BREAK ? will appear. Press BREAK again and you will return to the Menu.
$N$ - Next Segment - Press $(N$ to either define or review the next segment.
Make sure that your printer is properly connected. Press $H$ (a lower case " $h$ " won't work). A copy of Segment 1 will be printed. If there are any errors, press (A) and replace the segment. After replacing a segment, you will return to the Menu. Call the segment back (by pressing (1) , and review the segment a second time. If you have made revisions, press $[H)$ to get a printout of the revised segment.

## Defining Segment 2

Now we will create Segment 2 to define other fields necessary for our data base. Press (N) (fur Next Segment). Press (0) to store this new segment on Drive $\mathbb{Q}$. If you are using a single hard disk, press (4).

A new prompt will show on your screen:

> Enter The Number Of Characters Of Data
> To Be Contained In This Segment (1-256)

In Segment 1, the number of data field characters (i.e. 85 spaces available for data) was preset by the program. Profile+ lets you select the number of data field characters available for Segments 2 through 4. If you are not going to use all 256 possible character spaces, you don't have to waste diskette space. Conserving space lets you store more records. Record capacities are explained further in this section under Expanding Files and in the Reference Section under Expand Existing File.

Once you define the number of data characters in a segment, you cannot change the value. Be careful to leave enough room for any additional fields you might want lespecially in the last segment as you cannot have more than four segments), but avoid wasting space needlesslv.

Segment 2 of the SALESMEN data base will use 70 field character spaces to hold data.

Type 7 (D) and press ENTER.
The screen now shows the number of data fields, characters available for data fields, and characters available for headings in Segment 2. Notice that the first available field number in tuis segment is Field 10 Although each segment is stored as a separate part of the data base, the field numbers are consecutive from the first segment to the last segment.

Enter the following data for Segment 2:

| Field \# | Field Heading | Max Field Length |
| :--- | :--- | :---: |
|  |  |  |
| 10 | First Name | 10 |
| 11 | Street | 15 |
| 12 | City | 10 |
| 13 | State | 2 |
| 14 | Zip | 3 |
| 15 | Phone | 12 |
| 16 | Date Hired | 8 |
| 17 | Total Sales By Unit | 8 |

When you have entered the data for Field 17, you will return to the Menu. Go back and review Segment 2. Print a copy of the fields in Segment 2 by pressing (H).

| Field \# | Field Heading | Max Field Length |
| :--- | :--- | ---: |
| 01 | District | 10 |
| 02 | Position | 10 |
| 03 | Last Name | 15 |
| 04 | LB Set | 4 |
| 05 | DH Set | 4 |
| 06 | H Set | 4 |
| 07 | Sales By Unit | 10 |
| 08 | Sales By Amount | 10 |
| 09 | Commission | 10 |
|  |  |  |
|  |  |  |
| Field $\#$ | Field Heading | Max Field Length |
|  |  |  |
| 10 | First Name | 10 |
| 11 | Street | 15 |
| 12 | City | 10 |
| 13 | State | 2 |
| 14 | Zip | 5 |
| 15 | Phone | 12 |
| 16 | Date Hired | 8 |
| 17 | Total Sales By Unit | 8 |

## Defining Segment 3 and Segment 4

Segment 2 completes the fields needed to store personal data concerning an individual salesman. We need some additional fields for special record keeping about the salesman's performance. Even though you may not use every field in every record, you must still have the field defined and stored if you intend to use it at all.

Later, we are going to create two different reports for each salesman. We will have a monthly report, showing his progress and sales for the month, and a yearly composite. We need fields for each month and for the year.

We also want our records to compute the number of volumes each salesman has sold for the month and the dollar value of his sales.

Segment 3 will contain the data fields and category names for the months and the year. Segment 4 will contain the data fields we will use to show the volume and dollar amounts for each set.

You should have just printed a copy of the fields in Segment 2. Press $\mathbb{N}$ to define the next segment, Segment 3. Press (©) to store Segment 3 on Drive $\rrbracket$. Type (8) (8) and press (ENTER for the number of data field characters in the third segment.

Enter the following data for Segment 3:

| Field \# Field Heading | Max Field Length |  |
| :--- | :--- | :--- |
|  |  |  |
| 18 | Jan | 6 |
| 19 | Feb | 6 |
| 20 | Mar | 6 |
| 21 | Apr | 6 |
| 22 | May | 6 |
| 23 | Jun | 6 |
| 24 | Jul | 6 |
| 25 | Aug | 6 |
| 26 | Sep | 6 |
| 27 | Oct | 6 |
| 28 | Nov | 6 |
| 29 | Dec | 6 |
| 30 | Year | 4 |

Press [ENTER] to store the fields and return to the Menu.
At the Menu, press (1). Enter the data base name, and segment number, then review Segment 3. Press $H$ to print a copy of the fields in Segment 3.

Press $(N)$. Press $(D)$ to store Segment 4 on Drive $\mathbb{C}$. Segment 4 will require 48 field character spaces. Since this is the last available segment, we will include some extra space in case we decide to add fields to our segments.

Type (1) (5) (0). This will give us enough extra space.
Enter the following data:
Field \# Field Heading Max Field Length

31 LS Units 7
32
33
34
35
36
DH Units 7
H Units 7
LS Amt 9
DH Amt 9
H Amt 9
After entering the data for Field 36, press ENTER. You will be returned to the Menu. Review Segment 4 of SALESMEN. Press (H) to print a copy of the fields. Notice that the Option $N$ (for Next Segment) is no longer displayed because this is the last segment.

Press BREAK twice to return to the Menu.

## Defining Screen Formats

The next step in setting up a data base is to design the way you want Profile+ to prompt you on the screen for the data required.

At the Menu, press (2) (Define Screen Formats).
The screen will show:
Enter File Name
Or Press BREAK to Exit.
Enter the data base name, $S$ (A)CDCETSCMCECN.
The screen now shows:
Enter Screen Number (1-5).
Profile+ lets you design up to five screens for each data base. This lets you put only the information you wish to be prompted for on any one screen. You may wish to separate the data for clarity, security, or screen space considerations. We will design two screens for SALESMEN - one screen to prompt for monthly statistics, and another to prompt for yearly statistics.

## Designing Screen 1

We will start with Screen 1. Press (1).
The screen shows:

> New Screen (Y/N).

Press $(Y$. If you press $N$, you will return to the Enter File Name prompt.
The screen is now blank except for two lines across the bottom. The first line is marked off like a ruler to help you to center your data. The second line tells you how to save the screen or to cancel this step.

Note: If you press a format number to begin designing a screen (and answer $X$ to the new format question), you must enter something in the screen, or the program will not work correctly.

## Field Indicators

Before you begin to arrange the data fields on the screen, you must learn several symbols that indicate to Profile+ the type of data each field will contain. These symbols help keep your data accurate. For example, if a numeric symbol is in a field, the field will not accept letters as data. The symbols are:

*     - Alphanumeric Field - The field will accept any character - alphabetic, numeric, or marks of punctuation.
\# - Numeric Field - The field will accept only numbers, decimal points, or minus signs. Numeric fields are used for data such as telephone numbers or employee numbers.
. - Decimal Field - A field containing automatic decimal points. If a decimal point is not entered during data input, or if you enter less than two digits (to the right of the decimal point), Profile+ automatically puts a decimal point at the last two decimal places in the number. This type of field is used for dollar amounts or percentages.
! - Protected Field - A field whose data can be displayed but not changed from the keyboard. Fields containing the results of math formulas would typically be defined as protected fields.
+     - Add to Field - A field whose data will be added to data in other fields. This type of field can be used to total dollar amounts or quantities.
-     - Subtract From Field - A field whose data will be subtracted from another field. For example, this can be used to find a total due amount (the amount due minus any payments made).
\{ - Date Field - A field containing a date in the format MM/DD/YY. If you enter a $D$ in this field during data entry, the program will use the current date set at power up. This date format produces dates that cannot be sorted easily, due to the confusion that might arise from grouping together the same month for two different years.
\} - Date Field - A field containing a date in the format YY/MM/DD. If you enter a $D$ in this field during data entry, the program will use the current date set at power up. This format would be preferred for sorting by date.
\& - Date of Last Update Field - A field protected and automatically maintained by Profile+, showing the last date a record was updated, using the format MM/DD/YY. Allow eight spaces for this field. If only month and day are needed, allow only five spaces during field definition.
(a) - Date of Last Update Field - A field protected and automatically maintained by Profile + , showing the last date a record was updated, using the format YY/MM/DD. Allow eight spaces for this field. If only year and month are needed, allow only five spaces during field definition.
$<-$ Must-Fill Alphameric Field - A field containing any character alphabetic, numberic, or marks of punctuation - in which data must be entered (otherwise, the program will not store the record).
> - Must-Fill Numeric Field - A field containing only numbers, decimal points, or minus signs, in which data must be entered.
$\wedge-$ Must-Fill Decimal Field - A field containing decimal points in which data must be entered.
[ - Must-Fill Date Field - A field in which a data must be entered in the format MM/DD/YY. If you enter a $D$ in this field during data entry, the program will use the current date set at power up.

1 - Must-Fill Data. Field - A field in which a date must be entered in the format YY/MM/DD. If you enter a $D$ in this field during data entry, the program will use the current date set at power up.

As we set up the screens for SALESMEN, we will demonstrate the use of the various types of field symbols.

## Keys Used in Designing the Screen Layout

Look at the scale at the bottom of the screen. Each dot represents one space, with 80 spaces available across the width of the screen. There are special markers each five and ten spaces, and a special mark for the center of the screen.

The screen is 20 lines high. Several keys are used to move the cursor around the screen. Using any of these keys while holding down the REPEAT key will cause the action of a key to be repeated. The keys are:

-     - Moves the cursor to the left one space. If used in the first space of a line, the cursor will move to the last space of the previous line.
$\Theta$ - Moves the cursor to the right one space. If used in the last space at the end of a line, the cursor will move to the first space in the next line.
(I - Moves the cursor directly up one line. If used in the first line, the cursor will go to the last line.
(D) - Moves the cursor directly down one line. If used in the last line, the cursor will go to the first line.
(SPACEBAR - Moves the cursor to the right one space. Any characters the cursor passes over will be erased.
(F1 - Duplicates whatever is under the cursor and moves the remainder of the line to the right one space. For example, if the cursor is on the S of SALESMEN, (FD will change this to SSALESMEN. If (F1 is pressed while the cursor is positioned on a blank space, it will add blank spaces in front of any data to the right of the cursor.
(F 2) - Deletes the character the cursor is on and moves the entire line of data after the cursor to the left one space.

TAB - Moves the cursor eight spaces to the right.
BACKSPACE - Moves the cursor back one space, erasing any character beneath it.
(ENTER - Moves the cursor to the beginning of the next line.
ESC - Records the updated screen.

## Defining Screen Formats (continued)

## The Screen

We are now ready to design the screen layout. Follow the instructions below exactly. An illustration showing you the final screen appearance follows this sequence.

1. First we will give the screen a title. Type the company name (Enrichment Encyclopedias, Inc.) on the first line.
2. Press the space bar 27 times. Now type this heading on the same line to identify the report:

## Monthly Salesman Report

The cursor will automatically drop to the start of the second line.
3. To separate the title from the rest of the record, use $\square$ and REPEAT to create a bar across the screen in the second line. For the remaining steps, refer to the format sheets that you printed for Segments 1 through 4 to tell you the field numbers, headings and lengths.

FIIST LETTSR WKLL APPEAR HSCL
4. Skip the first space in Line 3 by either pressing the spacebar or $\Theta$. Type:


We want the salesman's last name to be first in the record. Notice that although we called the field Last Name in the file format, we used Name, Last here. The important things are the field number and the field length.

After the colon, we skipped two spaces to separate the field heading from the data that will be entered into the field.

Next comes the field indicator. We used the symbol < to make this a MustFill Alphanumeric field.

Look on the Data Format sheets. The Last Name's field number is 03 . You do not use a 0 in front of the field number in this step. The 3 after < tells Profile+ that the data in this field will be data in Field 3. You must type the field number in your screen formats so the program will know what data is being entered.

Starting with the field indicator (<), we count spaces for 15 characters (the number of characters we allotted to Last Name in our file formats). After the fifteenth space (under the, in Inc.), / is used to show where data input ends for this field. The / is only to help you visualize the final screen appearance and is not required.

When your data－filled records are printed，the field numbers and the slashes will not be displayed．Instead，the appropriate data will appear，beginning at the position of the field indicator，and followed by an end marker dot（which covers the slash）．

5．Press the spacebar 27 times to move the cursor to the right（under the $M$ in Monthly Salesman Report）．Type：
$\rightarrow 0$ in（LAST）


Again，skip two spaces after the colon．We allotted ten spaces for Position in defining our segments，so the $/$ is in the tenth space after the symbol＊ （under the $r$ in Report）．The＊tells Profile that any alphanumeric characters may be entered in this field．Press（ENTER）to go to Line 4.

6．Press the spacebar once．Line the colons up in rows．Type：

7．Press the spacebar or use the - key to move the cursor under the $P$ in Position．Type：

District：ロロー＊ロロロロロロロロロロ
Press ENTER to go to Line 5 ．
8．Press the spacebar once．Type：


9．Press the spacebar or use - to move the cursor under the $D$ in District．
Type：
Hired $\square$ On ：$\square \square \square \square(B) \square \square \square \square \square$
Notice that we made this a Must－Fill Date Field in the format MM／DD／YY．
Press（ENTER）to go to line six．
10．Press the spacebar once．Type：


Press［ENTER to go to the next line．

## Defining Screen Formats (continued)

11. Press the spacebar once. Type:


Notice there is no slash for this field. We allotted only two spaces for the state. Since this field number is two digits long, there is no room for a slash here. Remember, the slash is for your reference only and is not used by the program. Press (ENTER) to move to the next line.
12. Press the spacebar once. Type:


This will be a numeric field which only accepts numbers. Press (ENTER to move the cursor to Line 9.
13. Press the spacebar once. Type:

Phone $\square$ No. $\square: \square \square(\#)$
Press [ENTER to go to Line 10 .
14. The rest of our screen will contain statistics. To separate the personal information from the statistics, use the spacebar or the $\square$ key to position the cursor on line 10 directly under the . (in Inc.). Type:

Sales Report
Press [ENTER to move to the next line.
15. Use $\odot$ and REPEAT to create a line across the screen in Line 11.
16. Press the spacebar twice. Type:


This will be a protected field. The data in this field will be computed by Profile+'s Math Package (which we will use later in the manual). You will not be able to enter this data directly. Press [ENTER to go to Line 12.
17. Press the spacebar twice. Type:

SALES $\square$ BY $\square$ AMOUNT $: \square \square \subset(B \square \square \square \square \square \square \square \square \square$
Press (ENTER to go to Line 13.
18. Press the spacebar twice. Type:


When you design your screens, you can type headings or any other characters that are not defined by the formats. These characters are used for clarifying the screen. They cannot be used to create space for data input.
19. Press [ENTER to move to the next line.
20. We will now create some headings for columns of data. Use $\square$ and REPEAT to create a line across the screen in line 15.
21. On line 16, move the cursor under the $Y$ in SALES BY UNIT and type:

Description
22. Press the spacebar ten times and type:

Sets
23. Press the spacebar eleven times and type:

Units $\square$ Sold
24. Press the spacebar eleven times and type:

Extended $\square$ Price
25. Let's separate the headings we just entered from the data that will be entered under them. Move the cursor under the D in Description. Use $\bullet$ and (REPEAT) to underline this heading. (The line should be 16 dashes long.)
26. Move the cursor to the S under Sets. Use $\square$ and REPEAT to underline Sets with five dashes. Press the spacebar six times and continue with the line of 18 dashes under Units Sold.
27. Press the spacebar three times and underline Extended Price. Let the line extend across the rest of line 17 .
28. On line 18, press the spacebar until the cursor is under the $D$ in Description. Type:

Library $\square$ Sets
29. Press the spacebar until the cursor is under the $S$ in Sets. Type:

30. Press the spacebar six times. Type:

LS $\square$ Units
31. Press the spacebar twice. Type:

32. Press the spacebar three times. Type:

LSC $\qquad$ Amt
33. Press the spacebar twice. Type:(3) (4) $\qquad$ $\square \square$ $\square$ $\square$ CD
34. Under the L of Library, type:

Deluxe $\qquad$ Home
$\qquad$ Sets
35. Under \#4 in the line above, type:
(\#) (5) $\square \square \square$
36. Under LS Units, type:

DH■Units
37. Press the spacebar twice. Type:
$\square(3) \square \square \square \square$
38. Under LS Amt, type:

DH■Amt
39. Press the spacebar twice. Type:

40. Under the $D$ in Deluxe, type:

Home $\square$ Sets
41. Under \#5, type:
(\#) $6 \square \square \square$
42. Under the H in DH Units, type:
$\mathrm{H} \square$ Units
43. Press the spacebar twice. Type:
$\square(3)(3) \square \square \square \square \square$
44. Under the H in DH Amt, type:

H■Amt
45. Press the spacebar twice. Type:


## Defining Screen Formats (continued)

Look over the screen to make sure that you have not made any typographical errors. Your screen should look like this:


Use the arrow keys to move to any point that appears incorrect. After you have made any needed changes, press ESC to save the screen.

Press $\mathbb{Y}$ for a printed copy of the screen layout. Press $\mathbb{N}$ since we do not want to password protect this screen. You will return to the Main Menu. We are not finished with this screen yet. In the next section, we will discuss several ways to change the appearance of a screen.

## Defining Screen Formats (continued)

## Reversed Lettering Option

Press (2) at the Menu to return to the Define Screen Formats Option. Enter the data base name $(S)(A)[L](E)(S)(M)[E)(N)$ and press 1$]$ for the screen number. The screen format we just designed will reappear.

To add impact to a screen and to highlight important areas of a screen, you can use the Reverse Lettering Option. Move the cursor to Line 10 (Sales Report).

Hold down the CTRL key and press $Z$. Release both keys, then press the spacebar. A white block is now in the space. Press the spacebar repeatedly until the cursor is two spaces in front of Sales.

Use the - to skip over the title. When you are using this option, use the arrow keys to move the cursor around without changing the screen. This saves you from having to repeatedly turn the option on and off. (The option is turned off by pressing (CTRLC(Y).)

Two spaces after Report, use the spacebar to fill the rest of Line $1 \rho_{\text {with }}$ white.
You can also use the Reversed Lettering Option to have the screen show black letters in the white boxes. The COMMISSIONS field will be an important field in our record. To make this field stand out, use the arrow keys to position the cursor on the C in COMMISSIONS. Type:

$$
(C)(M) M C I)(S) \mathbb{N}]
$$

and press the spacebar four times. Type $: \square$ and press ENTER to move to the next line.

Caution - Never use this option on field indicators or field numbers. If you do, you will not be able to enter data in those fields later.

Use the key to go to the $S$ in the SALES BY AMOUNT field. Type:

and press [ENTER to move down one line.
Now go to the S in SALES BY UNIT on the following line. Type:

## (S) $A \subset L C(E) \square(B) \subset Y \subset(U) C I T$

and press the spacebar twice. Type $\square$ and then stop.
To turn the option off, hold down the CTRL key and press $Y$.

## F1 and F2 Used with Reversed Lettering Option

While the Reversed Lettering Option is being used, the functions of $\mathcal{F} D$ and (F 2 change. Move the cursor to a blank line in the screen; for example, the line of dashes (line 11). Turn on the Reversed Lettering Option (CTRL (Z) and press (F1 or F2).

A thick white line appears across the screen. If there was type in the line, the type would have been set in reverse in the white line.

This line may be used to divide the screen into sections or to outline field headings or titles. To erase the line, turn off the option (CTRLC(Y) and enter dashes over the line, using the REPEAT key. Move the cursor up one line and erase the white line we created on line 10 , using the spacebar.
(F1) and (F2) are completely deactivated inside a Reversed Lettering block. The normal functions of (F1) and F2) are restored when the option is turned off, with one exception.

When the cursor is positioned relative to a reversed lettering block, F1 and (F2) function differently. When the cursor is to the left of a block of reversed lettering, repeatedly pressing FI will erase the block, one letter at a time - not move the line to the right.

The cursor must be to the right of a reversed block to move the remainder of a line to the left using the F2) key.

## Adding and Deleting Lines from a Screen Format

You can insert entire blank lines or delete formatted lines while designing a screen.

To move the line the cursor is on (and every line below it) down one line (inserting a new line), you can hold down the CTRL key and press (D. When you add a line, the line that was on the bottom of the screen (Line 20) scrolls off the bottom of the screen. It cannot be retrieved.

To move every line below the cursor up one line, you can hold down the CTRL key and press (U). This deletes the line that the cursor is on.

## Storing a Formatted Screen

When you are finished designing the format of a screen, you can store the format. Once you have stored a screen format, if you decide to change something, you can recall the screen, make changes, and store it again.

At the bottom of the screen are two options:
(ESC) - Records a newly formatted or updated screen.
BREAK - Restores the screen to its original state. A new screen will be left blank if (BREAK) is pressed. A screen that has been recorded will remain in the format that was last recorded. Be careful in using the BREAK key.

Store the format for Screen 1 by pressing (ESC. A question will appear at the bottom of the screen:

## Hardcopy This Screen (Y/N)

Important Note: Always check the printer connections before pressing $\qquad$ print. If the printer is not connected properly, you will lose the first few characters on the printout.

Press $\bar{Y}$. It is always a good idea to get a hardcopy of the various parts of your data bases. These copies are good for reference and offer security if your diskette fails (although you should keep current backups of your diskettes).

If you press $Y$ and nothing happens, your printer is not properly connected (or it is off-line). Properly connect your printer. You do not have to press " Y " again.

Press $N$ when you do not want to print a copy of the screen format.
After you answer the first question, another appears:

## Password Protect This Screen (Y/N)

If you password protect a screen, you will be required to enter the password everytime you want access to that screen in your records. This feature of Profile+ lets you store confidential records that can only be accessed by persons that know the correct password.

For now, we will not password protect this screen. Later we will password protect a screen, after you are more familiar with the program. Press $(\mathbb{N}$. You will return to the Menu.

## Adding a Field to an Existing Segment

At the Menu, press (2). Recall the screen for the Salesmen data base. This screen is to show the monthly statistics on a salesman, but nowhere on the screen do we have the month listed. We left this off so you could practice adding a field.

Press BREAK twice to restore this screen. At the Menu, press (1). Enter the data base name.

We need to add a field so we can enter the current month that will appear on the record. Look at the printouts of your segments.

Segment 4 has the most available space. Creating the field here would allow the full name of each month to be printed on the record.

If the company wanted to keep all the monthly records on file (i.e. have a different record for each month a salesman has worked for the company), then the month field is an important search field. The data base should be started over to include Month in Segment 1. It would be used to go through a salesman's monthly reports in order.

Our company is not interested in saving all the monthly records for each salesman. After each month we will print a hardcopy of the record for our files, then we will enter the next month's data in the same record. Therefore, it is not important to us to have the month field be a sort field. We will add it to Segment 4.

Press (4) to call up Segment 4. Press (A) (for Add Fields). You are now prompted to enter Field 37.

Type: Month and press (ENTER.
Enter (9) as the maximum field length. Press [ENTER twice to record this field and to exit Adding Fields.

You are now at the Menu. Go back to Segment 4 and make a hardcopy of the field listing for reference. Then return to the Menu.

## Adding a Field to an Existing Segment (continued)

## Updating Screen 1 to Add the New Field

Now that a field for the month has been defined, we can add it to our Monthly Salesman Report Screen. At the Menu, press (2). Enter the data base name and call up Screen 1.

In Line 10, move the cursor over to the first space after Sales Report. Press the spacebar once.

Type: for $\square \cdot(3 \subset 7 \square \square \square \square \square \square \square$.
Press ESC to record the screen. Print it, and bypass the password step, returning to the Menu.

Note: Because you have added the Month field as the last field in the last segment, none of your other field numbers have changed. Whenever you change the number of fields, all following fields will be affected. All of the fields will be automatically renumbered in the Segments by the program, but you will have to manually renumber all of your other formats (screens, reports, math formulas, etc.) accordingly. Remember this when you are adding or changing your fields.

## Reviewing the Data Base

Our data base now contains four segments and one screen (for monthly reports). We still need to create a second screen for yearly reports. We also need to create a math package that will compute values necessary to Screen 1.

After we have set up our data base, we will enter data on individual salesmen. From there, we will create report and label formats. The more complex features of Profile+ will be easier to understand using this example.

To complete Screen 1, we will now define the Math Package for Salesmen. This is done using the + option on the Menu. The rest of the features of the Profile+ Menu will be explained in detail later in this section.

## Defining Math Formulas

Press + (you do not have to use the Shift key, the program will also accept $\equiv$ ). The Profile + Menu is now on your screen. Notice that Option 2 is Define Math Formulas.

Press (2). Enter the data base name, $(S)(A)[D)(E)(S)(E)(N)$. Answer $(Y)$ to the new format question.

The screen now shows:
DEFINE MATH FORMULAS Enter Math Field Definitions:

The middle section of the screen is marked off in sections. The cursor is in the first line. The column the cursor is on is used to enter a field number. This field number is the location where the computation's answer is to appear. There are two spaces for the field number (the end of the column is shown as a small block). After this column is filled, the cursor skips to the space after the $=$ sign. This column holds the formulas.

Profile+ will perform addition, subtraction, multiplication, and division. The formulas for these operations go in this second column.

The small blocks at the right of the screen mark the end of the formula column. When the cursor reaches the end, it will go to the first column in the next line.

Only field numbers are used in column one. In the second column, four different references can be used. These are:

1. Fields - To use the value you have (or will enter in a field as part of a computation of another field), you enter the field number in a formula. For example, if we knew that a salesman's total amount of sales (\$1000) was in Field 8 in our file, we could determine his commission (Field 9) by entering a formula that tells Profile + that Field $9=$ Field 8 (the value in it, $\$ 1000$ in this example) times five percent. So, Field 9 could equal $\$ 50$ here.
2. Values - Any constant value that you want to use in your computation that is not another field is entered in the formula in quotation marks. For example, using the ommission example, five percent would be written as . 05 in the formula.
3. Operators - An operator is the symbol for the mathematic operations. These are:

> + for addition
> - for subtraction
> for multiplication
> / for division
4. Formats - The default results of formulas are shown with two decimal places. You can change this two ways:

1. To indicate Integer format, place the letter (I) anywhere in the body of the formula (an integer is a whole number; a number without decimal places).
2. To select a floating decimal point with no rounding, place the letter (F) anywhere in the formula.

All mathematic operations are performed calculator style, from left to right, and from top to bottom as the fields appear in the table. Up to 16 formulas (up to 63 characters) can be specified for each file, with up to 20 fields used in each.

Important Note: Remember that the calculations are from left to right.
Here is a sample formula:

$$
\begin{aligned}
& 1=2+3 / 4 \quad \text { Where field } 2=20 \\
& \text { field/f } \Leftarrow=20 \\
& \text { field } 4=40
\end{aligned}
$$

Resulting in: $20+30=50$, then $50 / 40=1.25$ (just as with a hand-held calculator). This does not result in $30 / 40=.75$ then $20+.75=20.75$ (as in a computer BASIC calculation).

Parentheses are not accepted by the math package. The math package rounds off when using mixed (decimal) numbers. The degree of rounding will depend on the calculation mode employed.

Because operations are performed from top to bottom in this chart, you must be careful in positioning your formulas. If you use the result of one formula in another, the second formula must be below the first. References to fields not yet calculated will be evaluated as zero.

All math operations are performed to 11 digits of accuracy. This allows numbers between -99,999,999,999 and $+99,999,999,999$ to be represented in integer format and numbers between $-999,999,999.99$ and $+999,999,999.99$ to be shown with two decimal places.

The Math Package recognizes two error conditions. These are:

1. Division by zero - When division by zero is attempted, the Math Package will substitute /D0 for the result. All formulas that reference a calculation that has resulted in a divide by zero error will, in turn, evaluate to /D0.
2. Field overflow - When field overflow occurs (i.e. the number of digits in the math result exceeds the size of the field), the Math Package will substitute

10 V for the result. Fields (whose formulas reference a calculation that has caused an overflow) may or may not overflow themselves, depending on their size.

Important Note: Calculations which are self-referencing (e.g. $10=10+$ " 1 ") will not work. All fields on the left side of a formula are set to zero before evaluation.

Also, the fields you use do not have to appear in any of your screen formats (Screen 1 or Screen 2 in this example), as long as they are defined in your data base segments. There is one case in which you can use fields that have not been defined in your data base segments. You can use a field that has never been defined (e.g. 99) as a buffer field for intermediate calculations if a formula is too long to fit in one line of the math package. For example, you want to add a group of fields that will not all fit on one line.

Use field 99 first (to hold extra fields as a temporary buffer field). Then, reference field 99 in your calculation line to get the final results. The math package will use the results of the calculations from field 99.

Now we will enter the math formulas necessary for Screen 1 in Salesmen. The first field we will calculate is Field 31, which is the number of units in the total Library Sets sold by the salesman for the month. Each Library Set contains 72 volumes, so we will multiply the number of sets (the value entered in Field 4) by 72.

In the first space in the first column, type (3).
The cursor moves to the space after $=$. Type $[1](4) d \cdot x(7)(2)$
This tells Profile + to take the value in Field 4, multiply it by 72, and place the answer in Field 31 in integer form.

Press ENTER twice to go to the next line.
Library Sets contain 72 volumes. The other sets contain:
Deluxe Home Sets, 36; Home Sets, 24. Enter the following formulas:
Line 2 - Type (3)(2) (then, after $=1 \times(5) \nmid(3)(6) \cdots$ and press [ENTER twice.

Line 3 - Type 3 (then, after $=1$ ( 1 (2) (2) and press (ENTER) twice.

Field 7 is SALES BY UNIT, the total of Fields 31 through 33. The next formula will add up the results of the above formulas to give this total.

Line 4 - Type $\square(7$ (then, after $\Rightarrow I(3)(1)+3)+3)(3)$ and press ENTER twice.

The next formulas will calculate the dollar amount of the sets sold. The amounts of each set are: Library Set, $\$ 3000$; Deluxe Home Set, $\$ 1750$; Home Set, $\$ 1200$. Enter the following formulas:
 (ENTER twice.

Line $6-$ Type 3 (then, after $=5)(1)(1)(5)$ (ENTER twice.

Line 7 - Type 3 (6) then, after $=6 \times(1)(2)(0)]$ and press ENTER twice.

Field 8, SALES BY AMOUNT, is the sum of Fields 34 through 36 . The formula would be:

Line 8 - Type $\square(8)$ (then, after $=(3)(4)+(3)(5)+(3)(6)$ and press ENTER twice.

Field 9, COMMISSION, is a percentage determined by the dollar amount of sales. The salesmen in this company receive a five percent commission. Enter this formula:

Line 9 - Type $\square(9$ (then, after $=8) \square(0)$ and press (ENTER twice.

Finally, Field 17 will be used later for a yearly total on a new screen. Enter this formula:

Line 10 - Type 1$][7$ (then, after $=$ IDCD 8$]+1] 9+2[8+$ (2) 1$]+(2)(2)+(2)(3)+(2)(4)+(2)(5)+2](6)+2]+7$ (2) 8$)(2)(9)$ and press (ENTER).

## Defining Math Formulas (continued)

The math format screen should look like this:


Look over the formulas to be sure that you have properly entered them. If you have not, use the arrow keys to move the cursor and correct them. When they are correct, press ESC to record the formulas.

A question is now at the bottom of the screen:

> Is Hardcopy Required (Y/N)?

Press $\qquad$ to get a printout for reference. You will return to the Menu.

## Expanding Files

Now that the data base is totally set up for Screen 1, we can enter the data for Salesmen. To do this, one last step must be done. Room must be created on the diskette to store the records (the actual name, address, etc. for each salesman).

To expand a data base (i.e. create diskette space), press 6 at the Menu. After entering $S(A) L \subset E(M) E(N)$, the screen will show:

## This file Is Currently Allocated $\emptyset$ Records <br> How Many Additional Records ....

For this example we will use ten. Type (1) and press (ENTER). The screen will tell you that a format is in progress - that Profile+ is creating enough space on the diskette to hold ten records. After the data base has been expanded, the Menu will be displayed.

A few precautions should be taken when you expand your own data bases. Never expand your data bases to numbers greater than the capacity of Profile+, and never expand to the maximum number of records in one step. Profile files can be made larger: they can never be made smaller.

Profile+ has limits as to the number of records it can store, depending on the data base size and the number of disk drives used with the system. The capacities for a data base (using all possible Data segment space) stored on one drive are as follow:

The maximum number of records for a 1 -segment data base is 3000 .
The maximum number of records for a 2 -segment data base is 800 .
The maximum number of records for a 3 -segment data base is 400 .
The maximum number of records for a 4 -segment data base is 300 .
You may have to kill BASIC (and other unneeded files) to reach these limits. The Salesmen data base, which consists of 4 segments, can hold a maximum of over 500 records. We are able to store more than the normal 300 record limit since we did not use all the possible Data segment space ( 256 bytes per Data segment).

When you use more than one disk drive, the number of records you can store increases dramatically. Using multiple drives and their capacities will be discussed later.

Special Note: A data base must exist before it can be expanded. If you misspell the data base name, the system will not be able to locate it and will ask you for the name again. If you are using multiple drives, make sure you have the correct diskette in the expansion drives.

## Entering Data in the Data Base

To begin entering data in the Salesmen data base, press 7 at the Menu, (Inquire, Update, Add). Enter the data base name, $(S)(A)(L)(E)(S)(M)(E)(N)$. Press (1) when asked for the screen number.

The next question asks you to enter a record number. This question is one of three questions that the Inquire, Update, Add mode uses to access a desired record or group of records.

After you have stored data in the data base, you can see any record by entering the record number. Since we have no records yet, press (ENTER to bypass this step.

The next screen shows the fields defined in Segment 1. You are asked to enter a scan field number. A scan field is a field that is used to define search criteria to search through records. Since we have no records yet, press [ENTER to bypass this step.

The third question is now on the screen. It asks if you want to add records. This is where you will begin entering data in the data base. Press $Y$.

Note: If you are in the Inquire, Update, Add mode but you have not expanded your data base or if all available records have data, you will be able to use (ENTER to bypass the three questions above, but you will not be able to add any records. If you forgot to expand, press BREAK twice to go back to the Menu and expand, following instructions in the previous section.

The screen shows the format designed for Screen 1. Notice that the field indicators, field numbers and slashes are not on the screen.

If any slashes appear in the screen, you miscounted the spaces in the field when the screen was formatted. If this happens, simply go back to the screen by pressing (2) at the Menu, and move the slashes where they belong. Then, record the screen and return to this step.

The small blocks after the field names indicate the end of the field. When the cursor reaches a block, it goes to the next field. When entering data in a record you must press [ENTER to go to the next field if you do not use all the available spaces.

The cursor is now at the Name field. You can enter the Screen 1 information, using all capitals, or capitals and lowercase. Enter the following information:

| Last Nam | - Johnson | Position - Sales |
| :---: | :---: | :---: |
| First | - William | District - Southside |
| Street | - 124 Eastheimer | Hired - 1/01/81 |
| City | - Fort Worth |  |
| State | - TX |  |
| Zip | - 76107 |  |
| Phone | - 817-555-0422 |  |

The cursor is at the Month field. Type April and press ENTER.
After you have filled in the Month field, notice that the cursor skips down to Library Sets.

It skipped over COMMISSION, SALES BY AMOUNT, and SALES BY UNIT because we made these protected fields (fields that you can't enter data in). When the record is stored, the Math Package will compute the values for these fields and fill them in.

The only other fields we need to fill in are the fields that contain the number of sets sold. The fields under Units Sold and Extended Price are protected fields that will be filled in by the Math Package. Enter the following information:

$$
\begin{array}{lr}
\text { Library Sets } & -5 \\
\text { Deluxe Home Sets }-5 \\
\text { Home Sets } & -10
\end{array}
$$

Notice that the numbers entered in these fields moved to the right after (ENTER was pressed. Profile+ always moves numbers to the right if all spaces in a numerical field are not used.

Look at the bottom of the screen. It tells you that you are in the Update Mode (i.e. enter data into records). It gives you two options:

## Press ESC To Record Changes, BREAK To Restore

Press ESC. The screen will tell you that it is CALCULATING. When the calculations are completed, Record 2 will be displayed.

If you have neglected to enter data into a "must-fill" field (Last Name and Hired are "must-fili" fields on this screen), the record will not be stored when you press (ESC). A white highlight will appear in the "must-fill" field (or fields) in which data must be entered. You must enter the correct data and press [ESC] to store the record.

To verify that the calculations were done, press BREAK twice. The command line at the bottom of the screen changes. While these commands are shown, the cursor is at the Enter Selection prompt. These commands will be explained soon. For now, we are going to take a shortcut back to Record 1.

Press $I$. Record 1 is now back on your screen. Both the $\square$ key and the $\square$ key can be used to move between records when the cursor is at the Enter Selection prompt.

The formulas in the Math Package have computed the values for the protected fields. Look at the command line. The options are:

D - Delete - If you press ( $D$, the screen will show:

* RECORD DELETION HAS BEEN REQUESTED * Reply Y Or N
(Y) will delete the record, returning you to a blank record and this set of commands. (N) will return you to the command line without deleting the record.

H - Hardcopy - Press $[H$ to print a copy of the record. It is wise to keep a printout of each of your records. If you press $(H)$ and your printer is not on or connected, the screen will show:

| PRINTER NOT READY |  |
| :--- | :---: |
| ENTER - Restart | $X$ - Cancel Print |

You can turn the printer on or connect it and press [ENTER to print the copy. After the record has been printed, the cursor returns to this command line. Press $X$ to cancel the command. The cursor returns to this command line.

U - Update - Press (U) to enter or change information in a record. When you press (U), the cursor moves to the first field on the screen and the command line changes to show two options: ESC will record any changes and BREAK will restore the record to its original state. After either command is executed, you will return to the command line.
$X$ - End Scan - Press $X$ to exit this mode. You will go to the first of the three questions in this mode, Enter Record Number.

ENTER - Next Match - This command is used with the scan field option. When When you are using a field as a search to find particular records, [ENTER takes you to the next record, if any, that meets the qualifications you have determined. You will learn to use this command when scan fields are discussed.

## Inquire, Update, Add (continued)

There are two options that are not displayed in the command line:
(D - Will take you to the previous "physical" record in the file. If (I) is pressed at the first record, it will return you to the Enter Record Number prompt.
(D - Will take you to the next "physical" record in the file.

## Special Keys in the Update Mode

There are a few keys used in the Update Mode to make adding or changing records faster. These keys and their functions are:
(ESC - Stores a completed or changed record.
BACKSPACE (pressed within a field) - Moves the cursor one space to the left, without erasing any characters.
(BACKSPACE (pressed at the beginning of a field) - Moves the cursor to the beginning of the previous field. If used in the first field in the record, the cursor moves to the last field.

BREAK - Restores a record to its state before the Update Mode was entered.

TAB - Moves the cursor to the beginning of the first field.
HOLD - Inserts data in a field from the corresponding field in the last successfully stored record (this will be shown in the next records we add to the file). This function will not work when screens are changed.

ENTER - Moves the cursor to the beginning of the next field.

-     - Moves the cursor left one space, without erasing any characters (similar to BACKSPACE within a field). If the cursor is on the first character of a field, pressing - moves the cursor to the first character in the preceding field.
$\rightarrow$ - Moves the cursor right one space, without erasing any characters. If the cursor is on the last character of a field, pressing $\rightarrow$ moves the cursor to the first character of the next field.
(I) - Moves the cursor to the beginning of a field if used within the field. If cursor is on the first character of a field, pressing $D$ moves the cursor to the beginning of the previous field.
(1) - Moves the cursor down to the beginning of the field immediately below. If there is no field immediately below, then the cursor moves to the first field found in the first line.
(F1 - Creates a space for adding characters by moving any characters beneath and to the right of the cursor to the right by one space. Any characters moved past the end of the field are erased from the field.
(F2) - Deletes any character beneath the cursor and moves all remaining characters in a field left one space.


## Adding More Records to the Data Base

To show some of the other features of Profile+, we need more records in the Salesmen data base. The best way to enter records is from the Add Records prompt. Because we returned to Record 1 to show you that the calculations had been done, we exited this stage.

To return to Add Records, first press $X$.
Press ENTER twice to go to Add Records ( $Y / N$ ). Press ( $Y$. Record 2 is now on the screen. Enter the data below in Records 2 through 5, using the keys discussed earlier. Remember to press ESC to store each record.

RECORD \#2

| Last Name | - Kilton | Position <br> - Dist. Man. |
| :--- | :--- | :--- |
| First Name | - Kelly | District - Northside |
| Street | -124 Davidson $\operatorname{Dr}$ | Hired |
| City | - Fort Worth |  |
| State | - TX |  |
| Zip | -76110 |  |
| Phone | $-817-926-6385$ |  |
| Month | - April |  |
|  |  |  |
| Library Sets | -6 |  |
| Deluxe Home Sets | -12 |  |
| Home Sets | -7 |  |

## RECORD \#3

| Last Name | - Thomason | Position <br> Dist Sales <br> First Name |
| :--- | :--- | :--- |
| - Brenda | District | Westside |
| Street | -1643 Overton | Hired |
| City | - press HOLD |  |
| State | - press HOLD |  |
| Zip | -87129 |  |
| Phone | $-817-336-8291$ |  |
| Month | - press HOLD |  |
|  |  |  |
| Library Sets | -2 |  |
| Deluxe Home Sets | -8 |  |
| Home Sets | -4 |  |

## RECORD 4

| Last Name | - Ackerson | Position - Dist. Man. |
| :--- | :--- | :--- |
| First Name | - Adam | District - Eastside |
| Street | -879 Throckman | Hired $-03 / 01 / 76$ |
| City | - press HOLD |  |
| State | - press HOLD |  |
| Zip | -76109 |  |
| Phone | $-817-735-8888$ |  |
| Month | - press HOLD |  |
|  |  |  |
| Library Sets | -6 |  |
| Deluxe Home Sets | -10 |  |
| Home Sets | -3 |  |

## RECORD \#5

| Last Name | - Putnam | Position - Sales |
| :--- | :--- | :--- |
| First Name | - Jeannie | District - Westside |
| Street | -497 Weston Ave | Hired |
| City | - press HOLD |  |
| State | - press HOLD |  |
| Zip | -76110 |  |
| Phone | $-817-335-9156$ |  |
| Month | - press HOLD |  |
|  |  |  |
| Library Sets | -2 |  |
| Deluxe Home Sets | -2 |  |
| Home Sets | -3 |  |

Be sure to press ESC to store this information.
After entering all five records, press $B$ BEAK twice, then press $X$ (for End Scan).

## Reviewing Records Using the Record Number

You can review the records in the file in several ways. One way is to use the Enter Record Number prompt. At the prompt, type (1) and press (ENTER.

Record 1 is on the screen. Use thekey to look at Records 2 through 5. You will hear the drive locating each record on the diskette.

If you want to look at a particular record (and you know the number), you can go directly to it by typing in the number at this prompt. This is the fastest way of accessing records in a large file. There are several other ways to search through your records.

Scan fields give you specific access to your file. Another way to go through your records is to use the indexing feature of Profile+. Indexing will be explained under the Profile+ Menu selections later in this section.

## Reviewing Records Using Scan Fields

At the Enter Record Number prompt, press (ENTER once to go to the Scan Field option.

The screen shows:


You can use any of the fields listed on the screen to search for specific records or groups of records. The fields shown are all the fields that you defined in Segment 1. You can scan using either numbers or letters.

There is a special symbol used to have Profile+ show you all records that contain any data in a certain field. This is called the wild-card symbol, made by typing $\equiv$ and pressing (ENTER) three times to bypass the rest of the prompts. You can also use it within the scan. For example, to find everything entered during September of 1981, you can scan for $(8)(9)[D \Leftrightarrow[D](1)$.

When scanning for specific data (within a larger data field), the wild-card symbol is used to tell the program which part of the information within the field is to be skipped over.

## Scanning Using Letters

Let's say that we want to see the records of all salesmen whose last names occur alphabetically after Johnson. To do this, type: (3) (for Last Name) and press ENTER.

The field Last Name is now displayed on the screen. The cursor shows you where to begin typing your scan name. It will allow you to type in up to fifteen characters (the field length for Last Name).

Since we want to find last names after Johnson, type: $(J)(O)(H)(N)(S)(O)(N)$ (Profile+ ignores differences between upper and lower case letters during a scan) and press (ENTER).

The screen will show:

> Enter Relationship (EQ,NE,GT,LT,GE,LE,RG) (Press Enter To Assume Equal To)..

The relationship you choose specifies the search criteria between the target value (what you are looking for) and the results that you want. Profile+ finds relationships for both numbers and letters. The relationships are:

EQ - Equal To - Scans or the exact target value. In this example, only the last name Johnson.

NE - Not Equal - Scans for all data except the target value. In this example, all names except Johnson.

GT - Greater Than - Scans for all data greater than the target value. In this example, all last names occurring alphabetically after Johnson.

LT - Less Than - Scans for all data less than the target value. In this example, all last names occurring alphabetically before Johnson.

GE - Greater Than Or Equal To - Scans for all data greater than or equal to the target value. In this example, all last names equal to Johnson or occurring alphabetically after it.

LE - Less Than Or Equal To - Scans for all data less than or equal to the target value. In this example, all last names equal to or occurring alphabetically before Johnson.

RG - Range Of Values - Scans for a range of values. After you enter (R) (G). you will be asked to enter a second target value. The second target value is the highest key in the scan - the low end of the scan must be entered as the first
target value. It will then search for all data between (and including) the two sets (either numbers or words).

Type (G]T for the relationship since we want to find all last names after Johnson. The relationship symbols must be entered in upper case for the program to recognize them. If you type them in lower case, the prompt will be repeated.

The screen now shows:
Enter Connective (AND, OR, ENTER) ...
This gives you the option of further specifying the search. If you type (A) ND and press ENTER, you will be asked for a second Scan Field number, and step 1 will be repeated. Records will only be displayed if they satisfy the criteria specified for both the first and second scans selected.

Records will only be displayed if they satisfy the criteris specified for both the first and second scans selected.

Here is an example using the connective AND: You want to see all records of salesmen whose last names occur after Johnson and whose position is Sales. In this example, only records meeting both criteria will be displayed.

OR also returns you to the Scan Field selection step to specify another scan. OR tells Profile+ to select records that meet either the first or the second criterion. For OR, you might specify that you want to see records of those salesmen whose last name's occur after Johnson or those whose position is Sales.

Pressing (ENTER (instead of entering a connective) begins the system's search for records that meet the criteria you described above, with no connective.

Press [ENTER. We will use this scan without a connective. The first record that will be displayed is Record 2. This salesman's name is Kilton. Pressing [ENTER will give you the next record that matches the qualifications of the scan - Record 3. This salesman's name is Thomason. Record 5 is the last record that matches the qualification (Putnam).

If you press ENTER (for Next Match) again, you will exit the selection mode since no other record matches will be found.

## Scanning Using Numbers

Using numbers in scans is a little trickier because Profile+ right-justifies numbers. To understand how to enter numbers for scans, you need to understand how numbers are stored by the program.

When you use the $f$ or . indicators in a screen format, you tell the program that the field will contain numbers.

Profile+ records \# fields without decimal places, unless you put decimal places in them. Decimal places are automatically placed in. fields, or in numbers that are the result of Math Package formulas (unless you specified integer format).

Addition and subtraction fields (which you specify by using the + or - sign in front of the number), do not automatically place decimal places in their results (unless the numbers that are entered into these fields already contain them).

In our Salesmen data base, we have fields that contain mixed numbers (numbers with decimal places) and fields that contain integers (numbers without decimal places). You must consider the type of number you are referring to when you use a number for a scan.

For this example, refer to the printout you made of Screen 1's format and go to Record 1. Commission (Field 9) contains mixed numbers - these numbers are calculated by the Math Package. We allotted ten spaces for this field. One of these spaces contains a decimal point and two other spaces are for digits to the right of the decimal point (since this field contains mixed numbers).

Think of the ten spaces as ten columns, each column storing a digit of the number, and the number being right-justified when stored (all digits moved to the right as far as possible, leaving any extra spaces in front of the number). In Record 1, Johnson earned a commission of $\$ 1787.50$. Think of this number as being stored as:

Digit: 1st 2nd 3rd 4th 5th 6th 7th 8th 9th 10th


You should still have Record 1 displayed on the screen. Press $X$ to exit the record stage, then press (ENTER to go to the scan field selection prompts.

Enter the scan field number (9), for Commission. Look at the number that we mapped out for Record 1. To find the salesman who earned this $\$ 1787.50$ commission, the commission amount could be entered with an equal relationship (i.e. find all records with a commission amount equal to $\$ 1787.50$ ).

Notice that the number is right-justified and that three blank spaces are in front of the number. In entering this number for a scan, you must copy this format. Use the spacebar to skip the first three spaces and type $(1)(7)[8](7)(5)(8)$. Press ENTER to signify an equal relationship, and press ENTER again to skip the connective stage.

Record 1 is now displayed on the screen. The commission is equal to the commission we entered. None of the other salesmen earned this amount for their commission. If you press [ENTER (for Next Match), you will return to the Enter Record Number stage.

We will use another example to further illustrate number entry. Go to Record 1. Field 4 (LB Sets) is a numeric field whose numbers are integers (whole numbers without decimal places). Four spaces were allotted to this field when it was defined in Segment 1.

In Record 1, a one digit number is in the field. Using the column description, this number is stored as:
Digit: 1st 2nd 3rd 4th

If we had a two digit number entered, it would be stored (right-justified) in the 3 rd and 4th columns.

Go to the scan field option. We will enter a range of numbers to find a group of Library Sets. Enter 4 for LB Set. Skip the first three spaces, using the spacebar. Press (2). Enter (R) (G) for the relationship. Enter (5) for the highest key in the range (you must skip the first three spaces as above). Press (ENTER for the connective.

The program will now search for records of those salesmen who sold between two and five Library Sets. Records 1,3 , and 5 will be selected.

Remember, numbers are right-justified when you use them in a scan. Looking at a record (to see the type of number that is in the field you want to use as a scan) will help you to enter your numbers correctly.

## Using Significant Digits in a Scan

When you enter numbers or letters in a scan, you do not have to use the entire word or number. For example, if you wanted to look for the last name, Johnson, in a record, your chances are fairly good that no other last name will match past the first four letters (John). Rather than entering Johnson, you could enter John.

Shortening the length of the field to be matched saves keystrokes.
Similarly, significant digits can be used in number scans. Even using significant digits, numbers must be right-justified. If you have four available spaces, for example, entering a number in the first digit would have this result:

> 1st 2nd 3rd 4th
> $--1-1-------1$

4

If you looked for a GT relationship, the program would find all numbers greater than 4000 . The 000 is implied. If a GE relationship is looked for, all numbers greater than or equal to 4000 would be found.

It does sound a little tricky at first, but with practice you will understand this concept. Experiment with the fields in the Salesmen records, enter significant digits in scans, change the relationships, watching what numbers or letters are matched.

## Ending a Scan

You can end a scan in two ways:

1. Press $X$. You will return to the Enter Record Number step.
2. Press (ENTER. If there are no more records meeting the specifications, you will return to the Enter Record Number step.

## Recalculating All the Math Fields

If you have changed a constant in a Math formula for a file (for instance, if commission was changed to $6 \%$ ), you have the option to recalculate all the math fields. Recalculation is done from the scan field prompt stage of Inquire, Update, Add.

To recalculate all records in a file, first go to the Enter Scan Field Number prompt. From here, enter any valid field number. Type the wild-card symbol $\equiv$ for data input, and press ENTER three times.

When the first record is displayed, notice the option CTRL R above the ENTER option at the bottom of the screen. Press CTRL (R). Every record in the file will be recalculated.

To stop calculation, press BREAK. When the recalculation is done, you will return to Enter Record Number.

Any time the scan field option is used, you can recalculate if math formulas are defined. You can choose specific records to be recalculated, using regular scan techniques.

## Designing Screen 2 - Yearly Sales Totals

Now you have seen a data base from the designing stage to entering data to the stage where you can specify particular records during a search. So far, we have only created one screen for the Salesmen data base.

To complete the salesmen's records for our company, we need a yearly sales total record for each salesman. We have already entered the necessary fields when we defined the data base formats.

Go to the Menu by pressing the BREAK key. Press 2 (Define Screen Formats). Enter $S \subset(A)[L C(S)[M)(E) C N$ for the data base name and press (2) for the screen number. Answer $(Y$ to the new screen question.

Use the following illustration of the format for Screen 2. Copy this format exactly, using the ruler markings at the bottom of the screen to determine the proper spacing. When you are through, the special features of this screen will be explained.


The bottom section of this screen (which begins with Total Sales by Unit) will hold the number of units the salesman sold for each month in the year.

Record the screen by pressing ESC. Print a copy of the screen for your records and answer (N) to the password protection question. To see how this screen works, we will enter some data in this screen for Salesmen.

## Switching Between Screens

At the Menu, press 7 (Inquire, Update, Add). Enter the data base name and ask for Screen 2. At the Enter Record Number prompt, type (1) and press ENTER.

Record 1, Screen 2 is now on the screen. Notice that some of the fields in this record are filled in. These fields are also in Screen 1. Once you have entered data in a field, Profile+ will display it on any screen containing that field. The fields that are blank are fields that are not used in Screen 1.

The cursor is at the Enter Selection prompt. Instead of pressing one of the options in the command line, press (1). The screen now shows Record 1, Screen 1. Press (2), and you will see that Record 1, Screen 2 is now on the screen. Pressagain and you will return to Record 1, Screen 1.

You can switch among all five screens for a data base (if all five screens are defined) by pressing the desired screen number at the Enter Selection prompt. Nothing will happen at this time if you press (3), (4), or (5), since we have only defined two screens (Screen 1 and Screen 2).

Earlier, you learned how to move forward and backward through the records by using $I$ and $D$ at this prompt. When you use these arrows to move through the records, records will be shown using the screen format of the previous record displayed.

## Entering Data in Screen 2

Display Record 1, Screen 2 on your screen. Most of the fields in this screen are already filled. We will complete the rest. Press $U$ (for Update).

- Notice the cursor is at Report for. Type 1 ( $8 \subset 1$. Screen 1 for this record was for the month of April. We will enter some figures for sales in January, February, and March, then we will copy the April figures from Screen 1. Press ten times to move to the JAN field.

At JAN, type 644 and press (ENTER).
For FEB, type 7 ( 5 and press (EN TER).
For MAR, type 8 ( 2 and press ENTER.
This salesmen sold 780 units in April. To verify this:

1. Press ESC to record the data so far.
2. Press 1 to see Screen 1 .
3. Check the value in the Sales by Unit field (780).
4. Press 2 for Screen 2.
5. Press $U$ for Update.
6. Move the cursor to APR and type 7 ( 8 . Press (ENTER).

We have no more months to enter now. Press ESC to record the data. A message will tell you that calculation is taking place. When it is completed, the total will show in the Total Sales By Unit field.

Each time you update this screen to add another month's figures, you enter the data in the Month field in the bottom half of the screen. After you record the screen by pressing (ESC), the total will change to reflect the addition.

Now enter the following data in Records 2 through 5. Use the key to move to each new record. Enter the figures in the month fields.

Record 2
Report for - press HOLD
Jan - 986
Feb -1022
Mar $\quad-854$
Apr -1032

## Entering Data in Screen 2 (continued)

```
Record 3
Report for - press HOLD
Jan -712
Feb - 486
Mar -956
Apr -528
```


## Record 4

```
\begin{tabular}{ll} 
Report for - press (HOLD \\
Jan & -864 \\
Feb & -928 \\
Mar & -1010 \\
Apr & -864
\end{tabular}
```


## Record 5

```
Report for - press HOLD
```

Report for - press HOLD
Jan -426
Jan -426
Feb - }38
Feb - }38
Mar -512
Mar -512
Apr - 288

```
Apr - 288
```

You should now have totals for each salesman's yearly sales through April.
Note: If you interrupt entering data and go through another process (for example, if you leave Screen 2 of a record to look at Screen 1, then return to Screen 2), the data will not be transferred when you press HOLD. If this happens, simply type the data instead of using the HOLD key.

## Defining Report Formats

So far, we have created a sample data base, defined data and screen formats, expanded records, and entered sample data in records. The next step is to define report formats.

Profile+ lets you define up to five different reports for each data base. Reports can arrange available data to show all aspects of information in your data base.

At the Menu, press (3) (Define Report Format). Enter the data base name $(S)(A) L D(E)(S)(M) /(N)$.
The screen now shows:

## Enter Report Format Number (1-5).

Press (1). The program will ask if this is a new report format. Answer by pressing $Y$. The format for defining reports is now displayed.

The screen shows:


The first line on the screen is for measurement. There are 80 spaces across the width of the screen. Every five spaces are marked by a + and every ten spaces are marked with a $\emptyset$ and a number above (to denote 10,20 , etc.).

You have the option to create wider reports (with 132 spaces across). Notice the group of asterisks at space 66 that mark the center of a 132 character wide screen.

To see the last part of the screen, press the TAB key. Spaces 54 to 132 are now on the screen, with the cursor at the center mark. Press (TAB) again to move the cursor to the last space in the first line. To return to the first half of the screen, press ENTER, then $(1$ to return to the first line.

Report formats are defined similarly to screen formats. (F 1) (F2), BACKSPACE, (ESC), BREAK), D, (D) the (SPACEBAR), and ENTER all perform the same as they do in defining screen formats.

TAB is different, as just described. $\rightarrow$ and $\square$ are the same with one exception. When used in the first or last space of a line, $\rightarrow$ and $\square$ do not move the cursor to another line.

Field indicators are used in defining report formats (as they are in screen formats). There are six field indicators for report formats. Some indicators can be used only in certain sections of the report format.

These two indicators can only be used in the TITLE LINES or HEADINGS LINES sections:
[ - Date - Use this symbol to print the date and day of the week on a report. Allow fifteen spaces. You can only use this symbol once on any one report.
\# - Page Number - Use this symbol to print consecutive page numbers on a report. Allow five spaces for the field length. This symbol can only be used once on any one report.

These three indicators can only be used in the FIELD LINES section:

*     - Alphanumeric Field - Use this symbol plus a field number to indicate where data from a field will print on a report.
$=-$ Total Field - Use this symbol plus a field number to indicate a total to be calculated for this column and shown on the report.
(a) - Record Number - Use this symbol to print record numbers on a report (in defining field lengths, allow five spaces for record numbers). You can only use this symbol once on any one report.

There is one indicator that can be used in any of the three sections:
? - Sort Field Type - This symbol prints either the name of the sort key used in running the report or the value contained in that sort field, depending on where it is entered.

Whenever ? is entered, it requires the same space as the field used for the sort. For instance, if you were using ? and Position was your sort field, you would need to leave ten spaces for the entry to print.

Title Line - When ? is used in a Title Line, it prints the sort field value of the first record selected, at the position where the ? is placed. If a Control Break is used, it shows the value contained in the Control Break in the same way on each page of the report.

Headings Line - When ? is used in a Headings Line, it prints the name of the sort field wherever the ? is placed. It will print the name of the Control Break in the same way on each page if one is used.

Field Lines - If ? is used in a field line, it prints the value contained in the sort field for each record. It appears as a column in reports (wherever the ? is placed), showing the actual sort criteria for each run.

## Formatting Report 1

Let's format a report for Salesmen using all six field indicators. The cursor is in the section of the screen called TITLE LINES. There are three lines available for titles.

Skip a space and type:

$$
\text { Monthly } \square \text { Sales } \square \text { Report }
$$

Center the title, using F1 and the REPEAT key (until the $M$ is lined up with the marker symbol at 56 ).

Press [ENTER to move the cursor to line 2. In this line, we will place the date and day of the week of the report. Profile+ automatically keeps track of the date and day when you enter the date in starting up the system. Skip the first space in this line.

To make the day and date print, type $D$.
The day and date will require 15 spaces to print. Be sure to leave 15 spaces after the field indicator [ each time you use this in a report.

At the right-hand side of this line, we will place the page number of the report. Profile+ will consecutively number pages of reports that run longer than one page. Space over to the marker symbol at 115 and enter:

$$
\text { Page } \square \text { \# }
$$

Anytime \# is used on the screen, a consecutive number will appear in a report. Because we typed Page in front of \#. Profile+ will print Page 1, Page 2, etc. Always leave at least five spaces for numbers when / is used.

Press ENTER twice to move to the next section of the report, HEADING LINES. There are two lines available for headings. The second line gives you room to split long headings into two lines.

In the first line of the HEADINGS LINES Section, type:

$$
\text { Sorted } \square \text { By }
$$

Skip three spaces and type:

$$
\text { Record } \square \text { No. }
$$

Each time you enter a heading, you need to consider the amount of data space in the column beneath the heading. Record Numbers contain five digits. Since this
heading is more than five spaces long, we know that there is room for the data in the column below. Skip three spaces after No. to allow space between columns.

On the same line, enter the headings that follow. Refer to the picture of the screen to see how the report format should appear. Notice that after you enter the first heading (Salesman), you must skip nine spaces.

Last Name is the field that will appear in this column. It has a field length of 15 , so seven extra spaces must be allotted for this. Two more spaces are needed to separate this column from the next one.

After you have entered Salesman (and skipped nine spaces), type the following headings on the same line:

| Type: | Position | and skip four spaces. |
| :--- | :--- | :--- |
| Type: | Sales By | and skip four spaces. |
| Type: | Sales By | and skip four spaces. |
| Type: | Commission | and skip two spaces. |
| Type: | LB Sets | and skip two spaces. |
| Type: | DH Sets | and skip two spaces. |
| TyPE: | HSPTS |  |

Press (ENTEA to go to the start of the next line. Type ??
This will print the name of your sort field under the heading Sorted By.
Move the cursor under the first Sales By heading. Type the word Amount. Move the cursor to the next Sales By heading. Center the word Unit as shown in the report format example.

Press ENTER to go to the FIELD LINES section. This section is used to enter the field indicators and field numbers to tell Profile+ what data to list under the column headings.

Under the R of Record No., type (a).
This tells Profile+ to place the record number (from which the data is extracted) in this column.

Under the $S$ of Salesman, type $*$ (3).

* is the field indicator for alphanumeric data. 3 is the field number for Last Name (we will not use the salesman's first name on this report).

Under the $P$ of Position, type (*) 2 .
If you are confused about the field numbers, refer to the segment listings you printed in Defining Data Formats.

Under the first letter of the remaining headings, type $\Rightarrow$ and the appropriate field number. This will print totals for each of the remaining fields. When you are through, your screen will look like this (use TAB) to see the second half):


Notice you did not use the second field line. If you had a field set aside in your records for comments, you could indent a few spaces on the second line and add the comment field number.

If there is no comment data found for a particular record, the second line is ignored and the program will move to the next record. If comment data is found, it will appear as an indented comment (indented below the information from the first field line). The program will skip a line and then print the next record.

Press [ESC to store this format. A -prompt appears at the bottom of your screen:


Enter Field Number For Control Break Or Press ENTER For No Control Break ..

A Control Break lets you divide a report into several pages to produce subtotals by category, instead of grand totals (which occur if you do not use a Control Break).

We could use Field 2 (Position) as a Control Break. This would let us separate our report to print a different page for each job title (all Sales on one page, District Managers on another, etc.).

The field you use for a Control Break must be a field that was defined in Segment 1 (a field available for scan field selection). It does not have to be a field used in the report (as long as it is a scan field from Segment 1).

If you are sorting on a Control Break that is not used elsewhere in your report format, using the ? option is a good idea. It allows you to quickly see how your report is sorted. You can always design a report with extra spaces reserved (as many spaces as your Control Break field requires) to use the ? option later.

To learn how to suppress blank lines and print summary reports, refer to the instructions for Suppressing Report Lines. For this report, press ENTER. Answer $[N$ to the password protection question. You will be returned to the Menu.

## Printing Report 1

Now that we have formatted a report for Salesmen, we can print it. At the Menu, press 8 (for Print Reports).

We formatted Report 1 to be 132 columns wide. Make sure that your printer is On Line and loaded with 132 column paper. (If your printer is designed for 80 columns maximum, you can redesign the report accordingly.)

Note: You must have the printer turned on and on-line before proceeding. The program will not respond properly when you print if you turn the printer on later.

The screen now gives you the option of specifying the number of print lines per page. We will use 60 , so press ENTER to let the program default to 60 .

You are now asked to specify the total number of lines per page (lines including top and bottom margins). We will use 66, so press (ENTER for the 66 line per page default.

The number of characters per line is the next question. Our report uses 132, so press [ENTER for 132 column default. (If a report exceeds 80 characters per line, owners of 80 column printers must enter 80.)

Note: These print defaults can be changed after you become familiar with the system. See Appendix D.

The screen now tells you to align the printer to the top of the form (top of the page) and to press (ENTER when ready. Align the paper and press (ENTER).

Enter the file name $S(S)[A][E](S) \subset M) \mathbb{N}$, and the format number 1 .

## Reports (continued)

The screen now shows:


First, you are asked for the field you will be sorting on. We will sort on Position, so type (2) and press (ENTER). You are asked to enter the length for sorting or to press ENTER to assume the length of the field.

We know that our records contain two different positions - Sales and Dist. Man. (for District Manager). Pressing (ENTER tells the system to use all the available digits in its search. This might be necessary if you had a lot of data that was close alphabetically. For example, in the words, Sales Man. and Sales, the first five letters are identical.

Each of our position names begins with a different letter. We could sort more records at one time by telling the program to sort only using the first digit (letter) of the field. This would be a sort length of 1.

Suppose you use the? indicator when defining a report and you specify a sort length of 1 . Only the first letter of the sort field will be printed in the title section. Press ENTER to print the whole name.

The screen will show:

> Enter Selection Field Number
> Or Press [ENTER To Print All Records ..

## Reports (continued)

This lets you limit or further specify which records you want to print. The wildcard symbol, $=$, can be used after you enter a selection field number. It will only records whose selected field contains any data. (This is similar to its use with scan fields.)

For now, press (ENTER. All five of our records will print without further specification.

The screen shows you the number of records selected ( 5 in this case) and shows that the program is SORTING. The record number of the record being printed is displayed. It also tells you that the system is active and that you may press $X$ to cancel.

When you are printing reports longer than one page, the bottom of the screen will appear as below after the first page is printed:

## Press the SPACEBAR when ready, C for continuous mode

If you press the spacebar, one more page of the report will be printed. This feature lets you use printers that take single sheets of paper. If you use continuous paper, you needn't stop after each page. Press (C) for continuous printing.

Examine the printed report. Notice that the totals for the fields that we requested (using the field indicator $=$ ) are placed after the last line in the report. Profile+ always tries to place totals across a single line. If two adjacent totals will touch or overlap, the second total will be placed on the line below.

The report also tells you the number of records selected to be printed on the page.

When the report is finished printing, you will return to the Enter Sort Field Number prompt to let you print another report.

Press BREAK (to skip all of the prompts) until you return to the Menu.
Using the selection fields gives you further control over the data in a report. Let's say you wanted to print a report using Position as a Control Break and specifying only those salesmen whose Sales By Amount was over $\$ 20,000.00$.

First use 2 (Position) as your Control Break when formatting the report. To print the report ( 8 on the Menu), you answer the printing, file name, and format number prompts. The Sort and Selection Field prompts appear.

You are not asked to enter a sort field because you automatically sort on your Control Break. Press ENTER for the length of the Sort Field. Use 8 (Sales By Amount) for the Selection Field Number and enter the number 20000.00.

Remember that numbers are right-justified - so you have to skip the first two spaces, then type 2 ( $)$ ( $)$ ( $)$

Then use (G) Tor the relationship and press ENTER for the connective.
By using different Selection Field Numbers, you can print many variations of one report format. This increases the usefulness of each report format.

## Suppressing Report Lines

Profile+ lets you suppress blank lines in the Title or Headings section. It also lets you suppress detail lines in the Field Lines section to produce summary reports.

To suppress blank lines in the Title or Headings sections (to get rid of unneeded space), place a backslash at the beginning of the line by pressing CTRL (9). The backslash must be the first and only character on the line.

To suppress detail lines in the field line section, use CTRL 9 to place a backslash at the beginning of the first field line. This will cause all fields that are not entered with a total, $=$, field indicator to be suppressed, producing a summary report. This summary report will show only totals (for fields specified by the = indicator).

## Defining Label Formats

The next Menu option in Profile+ is Define Label Formats. Many different types of labels can be printed to handle a variety of needs. Labels can be used for mailing addresses, time cards, file folder labeling, etc.

Press (4) at the Menu. Enter the data base name. Ask for label format number (1). Answer ( $Y$ ) to the new format question.

The screen for defining label formats is now displayed. It is very similar to the report format screen - except that it contains only one section, the FIELD LINES section.

To move the cursor around the screen, use the same keys used in report formats. Remember that TAB moves the cursor to the second half of the screen and that ENTER moves it to the next line.

You can format labels that are between one and eight lines long. You tell Profile what type of labels you are printing on in the Print Labels option.

You must be careful to format a label with the same dimensions you want to print (allowing for the line spacing between the labels).

For example, when you design a label, you must add the extra line spacing between the labels for a total spacing count (in lines) from the top of the first label to the top of the next label.

Label formats use four field indicators. The indicators are:

*     - Used for alphanumeric data. This indicator is used the most. The other indicators are for special formats.
(a) - Prints the record number on a label. This is useful for file folder labels and for mailing labels.
$<-$ Moves the field to the left, until it is one space away from the previous field. This is used to close gaps; for example, between first and last names, or between city, state, and zip.
? - Prints the value contained in the sort field that the labels will be sorted on (similar to its use in Report Printing). You can enter this symbol wherever you wish and as often as you wish, but remember, if the value to be printed exceeds the available label length, the value will be truncated to fit the available space. Be careful.

We will format a simple label for mailing. We will include the record number on this label.

In Line 1, type @.
Press ENTER to go to Line 2.
In Line 2, type * ${ }^{*}$ ( $\square$.
Leave ten spaces for the field length, and one more for column spacing.
Type ( $<3$. This will close any gaps between first and last names.
Press [ENTER to go to Line 3.
Type * 1 (1 and press ENTER.
Type (1) (2).
Skip 12 spaces and type $<10 \square<3$ and press ENTER.
(1)

We have entered all the fields for a salesman's address. Skip Line 4, Line 5, and Line 6.

You only have to enter the format for one label. When you tell Profile+ the dimensions of the labels form you will use in printing (by specifying the numbers of labels up and the length of the label carrier paper), Profile+ will repeat this format as many times as is necessary.

Press ESC to store this format. Do not password protect it.

## Printing Labels

Press 9 at the Menu.

## The screen shows:

## Enter The Total Number Of Lines Per Label ( ENTER For 6 Lines ) ..

We formatted Label Format 1 with six lines. The spacing between the labels is two lines. Add these two lines to the six label lines for a total of eight lines. Type (8) and press ENTER.

The screen now shows:

> Enter The Number Of Characters Per Line Or Press ENTER For 132 Characters Per Line ...

We will print our practice labels on regular 132 column paper (the same paper used for reports). Press (ENTER.

The screen shows:
Enter Number Of Labels Up (1-6) .

The number of labels up is the number of labels across the width of the paper. Profile+ will take this information and the number of characters across to figure out the spacing.

Press (3). When you are actually printing labels, there are several different sheet labels (sold by Radio Shack) which you can use. If you have a 132 column printer, make sure your labels do not contain more than 132 characters across.

Next, you are told to align the printer to the top of the form. Press (ENTER when this is done.

Enter the data base name. Enter Format (1). (The program will not accept any other number since no other formats have been defined.)

The screen now looks very similar to the scan field screen in Inquire, Update, Add. You are asked to enter a sort field number. Type (3) and press [EN TER for the sort field. The labels will be printed in alphabetical order, by last name.

Next, you are asked to enter the length for sorting. This is also similar to report
 printing. Press (ENTER to use the entire Last Name field.

NOT A SUB-SORT! ONLY AN EXCLUSION STEP,
Next, you are given the option of further specifying the labels you wanted printed. If, for example, you were mailing letters to those salesmen who sold over $\$ 20,000$ of merchandise in April, you would use Field 8 for a Selection Field. Type 8 and press ENTER.

Sales By Amount .......... is now on your screen. This is a numeric field, so you must remember to allow for right-justification. Press the spacebar twice and type:

Enter a GT relationship. Press (ENTER for the connective.
Four labels will be printed (all records except Jeannie Putnam's) in alphabetical order. Label printing stops after the first row of labels is printed. The two commands at the bottom of the screen are the same two used in printing reports. Press the spacebar to print one more line. Press © for continuous printing.

You can print addresses on envelopes if you specify one label up. Then you use the SPACEBAR to print one at a time, changing envelopes in between printing.

Press $X$ to cancel printing at any time. The program will skip one label at the end of printing, then return to the selection menu.

## Define Selection Formats

So far in this section, you have learned several of Profile+'s basic features that let you define and manipulate data. The features in the rest of this section are more complex. We will continue using the Salesmen data base.

Define Selection Formats (and all of the SCRIPSIT related functions) can only be used to full advantage with a multi-drive system. However, Define Selection Formats can be used with a single drive if the file that you create with Define Selection Formats can be copied onto the SCRIPSIT diskette.

To do this, first follow the Multi-Drive Instructions for Define Selection Formats. This creates the file: basename/SR1. (Using the sample data base, it would be: SALESMEN/SR1.)

This file must then be copied onto your SCRIPSIT diskette. The computer entry is: $C \subset(P)(Y)$ basename $D(S)(B)(1)(D)(D)$. The program diskette and the SCRIPSIT diskette need to be switched at the appropriate prompts.

## Multi-Drive Instructions for Define Selection Formats

Define Selection Formats is number 5 on the Menu. It combines Profile+ and Model II SCRIPSIT to print form letters and documents, using data from Profile+ data bases.

If you are uncertain about the SCRIPSIT document (which we will create to merge with our Salesmen data base), refer to your Model II SCRIPSIT Reference Manual.

For our Salesmen data base, we will print a form letter to be sent to all salesmen who sold over $\$ 30,000.00$ of merchandise in April. As with all other parts of Profile+, defining the data to be used is the first step.

At the Menu, press (5) (Define Selection Formats). Enter the data base name $(S)(A)[D](E)(M)[E \subset(N)$ and selector number 1 . (You can enter up to five selection formats.) Press $(Y$ to the new format question.

The screen now shows two columns for data: Extracted Field Name and Profile Field $\#$. The data in these columns tells the program what fields will be used to fill in the blanks in the merge document.

The Extracted Field Names do not have to be the same names used for fields (in defining data formats). Instead of entering LAST NAME for Field 3, you could, for example, enter LAST. You must, however, enter the correct field number for the field whose data you want to merge. Also, the SCRIPSIT base file must contain the same names that you enter in Define Selection Formats.

Enter the following data in two columns, pressing (ENTER to move among the columns.

| Extracted Field Name | Profile Field \# |
| :--- | :---: |
| LAST | 3 |
| FIRST | 10 |
| STREET | 11 |
| CITY | 12 |
| STATE | 13 |
| ZIP | 14 |
| SALES | 8 |

Check the data for accuracy, and press ESC to record it. If you update a format, then decide to return to the last recorded format, BREAK will erase any changes and restore the former format.

Press $N$ to the password question. You will return to the Menu.

Important Note: Anytime you change the selection formats, or the data that would be used during the selection, you must reselect the records. The Selection format tells which fields will be used when you do record selection. Existing extracted files will still be valid for use with SCRIPSIT, but they will not contain your new choice of fields.

## Selecting Records for Merging With SCRIPSIT

The next step in merging Profile+ with SCRIPSIT is selecting the records from which information will be taken. Press (A) to Select Records ("a" will not work).

Enter the $(S)(A)[D \in S](E)(N)$ data base name. Press $(1)$ to call up the selection format we just defined. The Segment 1 fields are now on the screen. They are used as sort fields here, just as they are used when printing labels.

We will sort the records alphabetically by last name. Type (3) and press (ENTER). Use the entire field length for the sort length. Press (ENTER.

The bottom of your screen now shows:
Enter Field Numbers To Select By. Press ESC To End Selection. .

The cursor is at the first column in the row. These columns are used to enter field numbers (that will tell Profile+ what qualifications a record must have for its data to be considered for merging). You can specify up to 16 different qualifications, similar to entering a scan field or defining a selection field for a report.

We will print the records of all salesmen who sold over $\$ 30,000$ of merchandise in April and who sold four or more Library Sets. Type 8 and press ENTER for Sales By Amount field. (The data match will be specified shortly.) The cursor is in the second column. Type 4 and press (ENTER for the Library Set field.

We will not use the other available columns, so press ESC to end the selection. The screen now shows four different columns.

The first column is equivalent to the AND/OR connectives in the search function. If you type anything in this column, $O R$ will be assumed. ( $A$ field can meet either criteria to be selected.) If nothing is entered in this column, AND is assumed.

We will use AND, so press (ENTER to bypass this column. The next column the chart shows the fields selected from the last screen. The cursor skips over these fields because you can not add to them here.

Next, comes the relationship. Six of the seven relationships described in the earlier sections are shown. RG (for range) is missing. You can still search for a range of values, but it is done a little differently. This will be explained shortly.

We want a GT relationship, so type GTT. (If you press Enter here, $E Q$ will be assumed.) The next column is used to describe the data to be found in the search. Entering numbers in this column is a little tricky. The end of the field is not marked, so refer to your field length printouts.

Sales By Amount is Field 8. Field 8 was allotted ten character spaces when it was defined. Numbers entered here must allow for right-justification. We want to enter the number " 30000.00 " in this column. This number takes eight spaces (include the decimal point).

Since the first two columns will be blank, skip the first two spaces in the column and type (3) (0) (D) (D) CDCD.

If you are confused about numbers and their entry, review Scanning Using Numbers.

Press ENTER to begin the next line. Press [ENTER to assume AND for LB Set. This tells Profile+ that before a record is used in the merge, it must meet the above qualification AND the one we will now define.

Type (G)(E) for the connective. Field 4 (LB Set) was allotted four character spaces when it was defined. Because it contains numbers, they are right-justified. We want to find all those salesmen who sold four or more Library Sets this month.

Skip the first three spaces and type (4). The chart is now complete for our merge. Press ESC to record the data. The screen will flash and tell you that it is selecting. Then Profile+ will show that it has selected three records. If it does not show three records selected, you have done something wrong. If so, press (A) at the Menu and start this step over.

After the screen has flashed the above messages and the file has been written to the disk, you will return to the Menu.

Remember: Anytime you change the selection formats, you must reselect the records or the merge will not work.

## Profile Plus and SCRIPSIT ${ }^{\text {™ }}$ (continued)

## Using RG in the Selection Process

A range relationship (RG) can be used in the Select Records stage. It is created differently than the other selection criteria. For any field that will require a range of values, enter the field number twice when you select records.

When you have recorded the numbers, the screen containing the Connective, Relationship, and Search For Data columns will be displayed. Any field number that has been entered twice can be used to find a range of data.

For the first listing of the field number, enter a GE relationship and the data you want to be the lower limit of the search. For the second listing of the field number, enter a LE relationship and the data you want to be the upper limit of the search.

You must use the AND connective when specifying a range relationship to make sure the program looks at both sets of data. The OR connective cannot be used to specify a range relationship, but it can be used with ranges in another way.

You could use OR to tell Profile+ to select records that meet either a range relationship OR another specified search criteria. For example, you might specify that you want to see records of those salesmen who sold between three and six Library Sets or those whose Commission is more than $\$ 30,000$.

## Previewing SCRIPSIT Selection Data

Before you begin to print a number of SCRIPSIT documents, it would be helpful to see the data that Profile+ will insert in your SCRIPSIT letters. Profile+ has a Selection preview utility.

Exit the program from the menu by pressing $X$. At TRSDOS READY, type $(B)(A)(S)(I)(C)(S)(E)(E)(T)(D)(B)(S) \subset(\cdot)(F)(1)$ and press ENTER.

The screen will first show: ENTER FILE NAME ? and then: ENTER SELECTION NUMBER?

After you enter $S(A)[D](E)[M] E[N$ and 1 to answer these two questions, the program will display the field names and the data that will be used in the SCRIPSIT files.

Type $(S) Y(S)[T](M)$ and press ENTER to return to TRSDOS READY (TRSDOS-HD READY).

## Creating the SCRIPSIT Document for the Merge

Now that you have prepared the Profile+ data base Salesmen to be used for a merge, you must prepare the SCRIPSIT document. If you did not use SELECT/BAS to preview your data, exit Profile + by pressing $X$. TRSDOS READY is now on your screen.

Take the Profile+ diskette out of Drive 0 and insert a SCRIPSIT 2.0 diskette. Place the Profile+ diskette in Drive 1. Type (I) and press (ENTER). Type $(S)(T)(A) T](U)(P)$ to initiate the SCRIPSIT program. Create a document to be used as a form letter. If the following steps seem too brief for you, consult your SCRIPSIT Reference Manual.

Follow these steps to create this document (2.0 SCRIPSIT only):

1. Press (F1 to create a document.
2. Press [ENTER when asked for a password.
3. Name the document LETTER1. Press ENTER.
4. Press ESC to skip the rest of the create document list.

A blank page is now on the screen. We will write a short congratulation note to all our top salesmen. We want their addresses to appear on the right side of the letter, so a format must be created. (Go to the format line by pressing CTRL(F).) Leave the margins set at 10 and 70 .

In space 41 , indicate a Tab setting ( + ). This will place the address to the right of the letter. Press ENTER to go to the body of the letter.

Type the following letter, remembering to use TAB to properly place the address. The graph line above the letter will help you properly position the text.

| 1 | 2 | 3 | 4 | 5 |
| :--- | :---: | :---: | :---: | ---: |
| 012345678901234567890123456789012345678901234567890127456789 |  |  |  |  |

Congratulations! You are among the company's top salesmen for April! Your sales total for April was $\$\{$ SALES $\}$. We at Enrichment Encyclopedias are proud to have you on our team.

Sincerely,

W. W. Wegerg

President

Now it is time to do the merge. Press CTRL (U) (M). The screen will now ask if you want to use the SCRIPSIT document as a base document or as merge information. Press (B).

Next you are asked Name of merge document (enter TRSDOS file name)? The TRSDOS name of the Profile+ file we are using is SALESMEN/SR1. (SR1 is the name of the first selector format.) If the second format were used, it would be called SALESMEN/SR2, etc.

Type $(S)(A) L D(E)(M)(E)(N)(D)(B)(1)$ and press ENTER). This data base name must be eight characters long (if it is shorter than eight characters it must be filled with zeroes to eight characters). The screen now contains printing specifications. We will not change any of these, so press ESC. The program should print the first letter.

If you did not place the Profile+ diskette in Drive 1 (or another expansion drive), the message File not found will flash at the bottom of the screen. If this happens, press ESC (you will go back to the letter), insert the Profile+ diskette, and start the procedure over.

While the letter is being printed, it will appear on the screen. When the first letter has printed (Adam Ackerson's), you are asked if you want to print the next page. This lets you print on your company stationary, stopping to change sheets for each new letter. When you press $\bar{\Gamma}$, Kelly Kilton's letter will be printed. If you press N , printing will stop.

When the printing is through, press ESC Q E to exit SCRIPSIT. Press ( $J$ ) and ESC to jump to TRSDOS. Remove the SCRIPSIT diskette from Drive 0. Take the Profile+ diskette from Drive 1 and place it in Drive 0. Type (I) and press ENTER.

Type (M) and press ENTER). The Profile II Menu is now on the screen.

## Profile Plus Menu

## Profile Plus Menu

The next option in the Profile II Menu is + (for Profile + Menu). Press + (you do not have to use the Shift key, the program will accept $\Xi$ ).

The screen now shows:


Earlier, we used Option 2 on this menu to define Math formulas for Salesmen. We will now look at the other Profile+ Menu options.

We will go through this Menu from top to bottom, each option being described in a different section.

## Indexing Files

The next option on the Profile+ Menu is 3 - Build File Index. Earlier, you learned how to look though the Salesmen records in the Inquire, Update, Add mode by using record numbers and scan fields. Indexing lets you go through your records in alphabetical or numerical order, using any field from Segment 1.

The indexing feature lets you start at any point in the data base, and then go either forwards or backwards alphabetically or numerically from that point. Press (3) at the Profile+ Menu.

Enter the data base name $(S)(A)[D](S)(M)(E)(N)$. You are asked to enter the field number to index. We will index by Last Name. Enter (3). Use the entire field for the sort length, and select all records. The index is now created. Index can also be a part of the User Menu (this will be explained later).

You are now at the Profile II Menu. To see how the index works, press 7 . Enter the data base name, and Screen 1. Earlier, you saw three prompts in this mode: 1) Enter Record Number 2), Enter Scan Field Number, and 3) Add Records ( $Y / N$ ). A new prompt has now been added between the first two. Press ENTER.

The screen now shows:
Index By: Last Name $\qquad$

To find the first record in the data base, type the wild-card symbol $(\Leftrightarrow)$ and press [ENTER. Record $\# 00004$ is now on the screen - Ackerson is the name closest to the front of the alphabet. To go though the records in alphabetical order (by Last Name), use the up and down arrow keys. Anytime you are using an index, Index Mode will appear in the lower left-hand corner of the screen.

You do not have to start with the beginning sequential record. You can enter any value (which matches a record) at the Index prompt. From the first record displayed, use the up and down arrows to go through the rest of the file alphabetically.

Important Note: Every time you add or delete records or change data in the field you are using for the index, the index must be rebuilt, using (3) at the Profile+ Menu or a User Menu.

You can index by more than one field if the two fields occur consecutively in the data formats. For example, if Last Name was Field 1 and First Name was Field 2, you could enter a field length that included both fields (say 25), and your records would be indexed by both fields, having, for example, David Smith occurring before Don Smith.

## Profile Plus Menu (continued)

## Defining User Menus

Defining User Menus is an advanced feature of Profile+ that may seem a bit difficult at first, but as you become accustomed to working with User Menus, you will increase your file efficiency and save a great deal of time.

Profile+ allows you to create customized menus. These menus let you use a single keystroke to access parts of your Profile+ system. User Menus can bypass names, format numbers, screen titles, and other keyboard responses, to take you directly to the desired part of the program.

The program can be made to return directly to the User Menu when finished. A User Menu can be called directly from the Profile II and Profile+ Menus.

We will create a User Menu for Salesmen. Follow this example carefully. When you have completed this section, you should be able to use this menu as a guide to create your own User Menus.

Press (1) to Define User Menus. The first prompt asks you to enter a menu name. A menu name may not contain any special characters or embedded spaces. When you enter a menu name, the program searches for the menu requested. If the program finds a menu with that name, you will be allowed to update its contents. If a menu is not found, a new menu will be created.

We will call our User Menu PRINTING. This menu will let us use a single keystroke to execute the various print commands used in SALESMEN. Type $(P)(B) \subset I)(N)(T) \mid I)(N)(G)$.

The screen now shows the word Heading and two markers.
A heading field may contain any information you wish. Think of it as a title line describing the menu. The heading will appear at the top of the screen when the User Menu is displayed.

Type PRINTING FOR SALESMEN FILE.
Press [ENTER. The cursor will move to the next line where a six-space ID field exists. The ID field can be used to record the date of the Menu. Type (D) (5) (D) (1) (8) (2).

Press E S C to record this data. The screen is now marked off in columns. Each menu may have up to 12 functions. These functions are defined in this screen.

Each entry will take the form:

> K T1111T......
> PPPPPPPP[1\{FFFFFFFF,S,HHHHHHH...\}

These letters stand for:
K - Keystroke to invoke this function.
TTIT1T... - Text describing this choice. (Menu Prompt)
PPPPPPPP - Program name. Must be one of the following: CLERK/EFC, PRINT/EFC, or LABEL/EFC.

FFFFFFFF - Data base name to be passed to the program. If a data base name is not eight characters long, it must be padded with zeros to a length of eight. (For example, TEST0000.)

S - Screen or format number to be used.
HHHHHHH... - Heading to appear on top of screen during processing.
In this format, the braces are required. The only character permitted between the data base name, format number, and title, is a comma.

The program names CLERK/EFC, PRINT/EFC, and LABEL/EFC are all described in the program files appendix. Briefly, this is what each is:

CLERK/EFC - The program that performs Option 7 (Inquire, Update, Add) on the Profile II Menu.

PRINT/EFC - The program that prints reports. Option 8 on the Profile II Menu.
LABEL/EFC - The program that prints labels. Option 9 on the Profile II Menu.
We will make an entry that will print Salesmen's report Format 1.
In the first space, type (R). This will be our keystroke that calls this menu Option K.

For T1111T.. type MONTHLY SALES REPORT and press ENTER. This report is a PRINT/EFC program, so type PRINT/EFC for P. Skip one space, then type \{SALESMEN,1,E.E. MONTHLY SALES REPORT\}.

Notice that the information in the braces matches the prescribed format.
Before we further modify this format to include another advanced feature, let's see how this works so far. Press ESC to record the PRINTING Menu. You are returned to the Profile II Menu.

## Preparing the User Menu for Access

Before the Printing Menu can be accessed, you must create a DO file named USER. Press $X$ to exit to TRSDOS. Type $B \in(U)[L \subset D \subset(U)[E]$ and press (ENTER).

The screen will now show, Enter command line 1-80. Type the User Menu name


The screen will show:

> Edit Complete, TRSDOS READY

Press (M) and ENTER to return to the Profile II Menu.

## Calling the User Menu

You can now call up the User Menu, PRINTING at TRSDOS READY (by typing $(P)(B)(I)(N) T](I)(N)(G)$ and pressing (ENTER). You can also call this menu from either the Profile II Menu or the Profile+ Menu. We will call it from the Profile II Menu. Press (U).

The PRINTING Menu is now on your screen. Notice that the option $X$ (Exit) has been added. Profile+ automatically adds this option to all Profile+ User Menus.

Press (R) to go to the report that prints Monthly Sales Reports. Notice that you have gone directly to the print specification prompts. You did not have to press 8 at the Menu, enter the data base name, or format number.

## Passing Parameters to Profile Plus

Pressing [R] from the Printing Menu lets you bypass entering the Profile II Menu option, the data base name, and the format number. Additional information can be added to User Menus to bypass the printing specification prompts.

This is done by passing these parameters to Profile+. When all the parameters have been defined, you can press a User Menu option that will execute all the required commands. In this case, we can make " $R$ " directly start the printing of the report.

We will set up our User Menu so that the program will automatically print Report Format 1. We will pass parameters that let you select only the record of the salesman who sold over $\$ 40,000.00$.

To change the User Menu, press BREAK twice. The Printing Menu is now on the screen. Press $X$ to exit to TRSDOS. Press $(M)$ to display the Profile II Menu.

Press + , then (1). Enter the menu name, $P(B) I \subset N \subset T \subset(\mathbb{C})$. We will not change any of the information on the first screen, so press ESC. The screen now shows the format we created for $R$.

Anytime you pass extended parameters to Profile+ (what we are doing now), the $P$ (program name) portion of the entry must begin with K/EFC. K/EFC is a command generator. It is used whenever your main menu entry must provide additional input after the start of a program.

Position the cursor in front of PRINT/EFC and press (F1) six times to insert enough space to type $K$ (D) E (F)C.

Leave one space between K/EFC and PRINT/EFC. The information in the braces will remain the same. We will now add information to the right of the braces.

Every time the program would normally respond to the ENTER key is denoted here by $\mathbf{I}$. This symbol is made by pressing CTRL and (D) together. When K/EFC is used, you must type a $\mathbf{I}$ before you begin copying the parameters to pass.

After the right brace type CTRL (CTRL (D)CTRL © CTRLCDCTRL


The first I must be inserted because K/EFC is used. The next four I's indicate ENTER being used to respond to the print specifications. (If you use different specifications, simply type them here exactly as you would in the Report Printing stage.)

08 answers the Enter Selection Field prompt. The data for that field comes next, including the right-justification.

The next is used to fill-in the rest of the data field, since we used only the first portion of the number (significant digits). GT is the relationship. The last indicates the connective.

Anytime you create entries in a User Menu, go to the entry step you are duplicating, and write down the responses you enter to the prompts, exactly as you enter them. Then, go to the User Menu and create your entry. Index can also be a part of the User Menu - you would enter: $\mathbb{K}$ (D)(E) F F C
$\square(I)(N)(D)(E)(X)(D)(E)(F) C C T R L)(D)(S)(A)(L)(E)(S)(M)(E)(N)$


Do not press ESC to record the menu yet.

## Adding M to a User Menu

Before we try out our User Menu, we will add one more step. Last time, when you went from the User Menu (Printing) to the Profile II Menu, you had to go to TRSDOS first. A simple entry will give you direct access to the Profile II Menu from the Printing menu.

Skip the next space for an entry. Then enter the following:
$\begin{array}{ll}M & \text { PROFILE II MENU (press (ENTER) } \\ M\end{array}$
Press ESC to record the updated Printing Menu.

## Reviewing the User Menu

You are now at the Main Menu. You can access Printing either from this menu or from the Profile+ Menu. Press (U). The Printing Menu is on your screen. Press (M) and you will return to the Profile II Menu. Press $X X$ and you will exit to TRSDOS

To see that R (MONTHLY SALES REPORT) works correctly, first make sure your printer is ready and loaded with 132 column paper $(80$ column paper for smaller printers). Press ( $A$ ) and your report will print (as shown below).


RECORDS SELECTED ضに币!

After the report has printed, you will return to the Print Report prompts. Press CBREAK twice and you will return to the Printing Menu.

## Non-Profile Plus Programs and User Menus

You have learned to create User Menus and user menu entries to perform all the processes that are generated from PRINT/EFC, LABEL/EFC, and CLERKJEFC. User Menus can also be used to call non-Profile+ programs.

You could create a utilities menu that contain entries like Backup and Format. A backup entry could be:

$$
\begin{array}{ll}
\text { B } & \text { BACKUP } \\
\text { BACKUP } \emptyset & 1 \mathrm{ABS}
\end{array}
$$

Pressing (B) from this User Menu would backup the diskette in Drive 0 to the diskette in Drive 1. To combine Format and Backup, you would use the command generator, K/EFC. A sample menu entry to Format, Backup and return to the Profile II Menu is:

$$
\begin{aligned}
& \text { FORMAT DRIVE } 1 \text { AND BACKUP } \\
& \text { K/EFC FORMAT :1 ABS ALT = } \begin{array}{l}
\text { BACKUP } \emptyset \quad 1 \text { ABS } M
\end{array}
\end{aligned}
$$

DO files and user written BASIC programs may also be called from User Menus. In the case of BASIC programs, you may return to the User Menu with the command: SYSTEM menu-name.

If DO files are called, the last entry in the DO file should be the menu-name.

## Associated Fields

Profile+ lets you associate the Segment 1 fields into logical groups. These groups are treated as a single field for searching, sorting, and selecting purposes. All fields in an associated group are processed when a single member of the group is specified by field number.

With associated fields, you can have several fields containing related data that can be treated as one group. We will look at how this feature might be used for customers with our sample company, Enrichment Encyclopedias, Inc.

We have defined a data base that takes care of the salesmen records for the company. There should also be a data base for customer records. We will not create this data base (since the majority of the data base would be repeating what you have already learned). Rather, we will explain how this feature can be used.

Associated fields are very useful fields for a customer data base. There is a strong possibility that one customer might buy more than one of the three products; for example, a Home Set and a Deluxe Home Set. The screen might be designed to show the first field as the greatest quantity of one product sold.

The rest of the fields are for quantity sales of other products in descending order. If the product fields are created as associated fields, the records could easily be scanned to see who bought a particular set or sets.

Associated fields are created during the first step, defining data formats. To associate fields, the headings must begin with an uppercase alphabetic letter followed by a right parenthesis. All fields that begin with the same letter/parenthesis combination will be members of the same associated group.

Here is a sample listing of how associated fields for the customer data base would be created. We will assume that some customers will not buy every one of the products:

| FIELD NUMBER | FIELD HEADING | FIELD LENGTH |
| :--- | :--- | :--- |
| 1 | LAST NAME | 15 |
| 2 | A) SET 1 (MOST SALES) | 10 |
| 3 | A) SET 2 (LEAST SALES) | 10 |
| 4 | A) SET 3 (LEAS |  |

Fields 2-4 are associated into Group A. When defining a screen format for this data base, the field numbers can be placed anywhere in the record. During data input (Inquire, Update, Add), the sets bought can be entered in descending order. By using a scan, you can find all the customer's records of people who bought; for example, a Home Set (whether it was their best or worst selling item).

For example, here are the monthly sales records for three customers, entered in descending order:

April Sales

| Jones Stationary | Mike's Bookstore | Campus Books |
| :--- | :--- | :---: |
| 5 Library Sets | 3 Home Sets | 20 Deluxe Home Sets |
| 3 Deluxe Home Set | 1 Deluxe Home Set | 5 Library Sets |
| 1 Home Set |  |  |

Any field number within the group can be used in defining the scan (all associated fields will be examined). A typical entry in the scan mode scan might be:

| 2 | Home Set |
| :--- | :--- |
| EQ |  |
| ENTER |  |

This would find all the customers that bought a Home Set, regardless if it is in Field 2, Field 3, or Field 4.

During report and label printing, associated fields may be specified as the sort as well as the search field. When sorting is specified for associated fields, the record will be passed into the sort as many times as there are non-blank data fields in the associated group.

The fields can be scanned normally (i.e. non-associated) by using the extended selection function. You could then find only the dealers that had Home Sets as their best selling item.

## Multi-Drive Record Capacities (Floppy Diskettes Only)

Note: If you have a hard disk system, refer to Expanding Existing File in the Reference section for storage capacities.

The following chart shows how many records your system can store, depending on the number of disk drives, and the number of segments a data base contains. This chart assumes one screen, one report, and the maximum segment length of 256 characters for Data Segments 2 through 4:

| SEG | 1 Drive | 2 Drives | 3 Drives | 4 Drives |
| :--- | :--- | :--- | :--- | :--- |
| 1 | 3000 | 9000 | 14600 | 20000 |
| 2 | 800 | 1800 | $* * * * *$ | $* * * *$ |
| 3 | 400 | 900 | 1800 | $* * * * *$ |
| 4 | 300 | 600 | 900 | 1800 |

The asterisks in the chart mean that the drive is not used for expansion. These figures were obtained by expanding a data base which contained only one segment of data and for which only one screen had been created. (To reach these limits, you may have to kill the BASIC file on your disk by using the "PURGE" command in your Model II Owner's Manual. See the appendix for a list of the files which can be killed after they have been used to create the desired function).

Profile+ lets you select the record lengths for Segments 2 through 4. You can use from 1 to 256 characters in these Segments. This prevents wasted disk space when using multi-segmented data bases.

With expansion drives, data bases that require a record length of 340 characters or less can store over 3,000 records. Multi-segment data bases of even smaller length can store up to 5,000 records. To do this, put Segment 1 on Drive 1 ( 85 bytes), and Segment 2 on Drive 2 ( 85 bytes). Then expand to 5000 . The maximum number of records for a single segment data base remains 20,000 .

If you try to expand a multi-segment data base past its capabilities, the message, DISK ERROR CODE 27 OCCURRED ON FILE - SALESMEN/KEY:Ø Disk Space Full, will appear and you will return to TRSDOS. If this happens, press (M) to return to the Menu. Then see how far the data base was expanded, by pressing 6 and entering the data base name.

A single segment data base, when reaching full disk capacity, will show:
Disk Space Full
and will exit to TRSDOS.







## Securing Your Files

## A Limited Menu

This feature of Profile+ lets you limit access to your data bases. If there are personnel in your office that shouldn't have access to the creating portion of Profile+, you can give them a diskette with a Limited Menu. A Limited Menu only allows access to Inquire, Update, Add and to the print functions.

To create a Limited Menu, exit to TRSDOS. Type (D) $D$ (L)CICMCICT and press (ENTER). The program will tell you that it is Installing Limited Profile Menu, then tells you to Press Any Key To Continue.

Press any key except Break (which will cancel and return the program to TRSDOS). The Limited Menu will be installed. The program will tell you that to restore the Master Menu, you must type $(D)(O \subset(U \subset N)(L)(I)(M) C T)$.

Press any key.
At TRSDOS READY, type (M) and press (ENTER).
The Limited Menu will now be the menu called by pressing (M).
The screen will show:


The Limited Menu eliminates the possibility of anyone accidently going into one of the create functions of the program and tampering with the files you have set up.

You can easily retrieve the Master Menu at anytime. Simply type
 TRSDOS READY is displayed, type (M) and press (ENTER).

The Master Menu is now displayed again.
Note: For greater security, use a Limited Menu (or a User Menu) and kill these files:

> CREATE/EFC
> CREATEX/EFC
> CREATEM/EFC
> LPFORM/EFC
> LBFORM/EFC

These can always be recopied from your working diskette or the "Master" if changes are needed. Before killing any of these files, be sure you are completely satisfied with your "set-up."

## Password Protection

Password protection of your data bases gives you the option of securing files. If you password protect parts of your data base, and use a Limited Menu, those persons who do not know the password will not be able to access those portions of your data bases.

We will password protect Screen 1 for Salesmen. Press (2) from the Profile II Menu (for Define Screen Formats). Call up Screen 1. Do not change anything in the screen, just press (ESC). Answer (N) to the hardcopy question.

You are now asked if you want to password protect this screen. Press $\bar{Y}$. You password up to eight characters long. Type $P(A) S(S) W C D$ and press ENTER.

Special Note: When using password protection, be careful to note if you have used upper or lower case letters (or a mixture). Profile+ will only accept the exact password.

After the eighth space is used, you will return to the Menu. Otherwise, you must press ENTER to record the password and to return to the Menu.

Screen 1 is now password protected. To see how this works, press 7 . Enter the data base name, and screen number. At the Enter Record Number prompt, type (1) and press ENTER).

You will not go directly to Screen 1 as before. At the bottom of the display, you are asked to enter the screen password. Type $(P) A \subset(S)(W)(D)(B)[D$ and press (ENTER).

Notice as you type, the characters are shown as \# signs. This is to insure security.

Once the proper password is entered, Record 1, Screen 1 will be displayed. Once you have answered a password prompt for a data base, as long as you stay in the records, you will not be required to enter the password again.

If you had originally asked for Record 1, Screen 2 you would not have had to enter the password. But if you tried to switch from Screen 2 to Screen 1, you would be required to enter the password before accessing the Screen.

Limited Menus, with password protected formats or screens, are an ideal way to insure security for your data bases.

You can eliminate or change the password by going back to where it was created (Define Screen Formats in this case) and answering (N) to the Password Protection prompt.

## Killing a Data Base

Now you have reviewed the features of Profile+. If you want to save the Salesmen data base as a reference, make a new backup of your Master diskette and use the new backup to create your own data bases.

If you want to kill the Salesmen data base from your diskette, go to the Profile II Menu. Press (K). You are asked to enter the data base name. Enter $(S)(A)[L)(E)(S)[M)[E](N)$. Press $Y$ when prompted, and the Salesmen data base will be killed. When the removal is completed, you will return to the Menu.

## Killing Data - Leaving Screens, Formats, Reports, etc.

You must do a $D \subset I \subset($ Dectory of each diskette being used as a set. Write down the REC LEN (Logical Record Length) of each file that ends in /KEY, /DAT, IDA2. and /DA3, and the drive each file is on (for example: SALESMEN/KEY - Drive ©).

Kill these four types of files on each of the diskettes in the set. You may use an asterisk in place of the data base name (i.e.):

$$
\begin{aligned}
& \text { KILL */KEY } \\
& \text { KILL */DAT } \\
& \text { KILL */DA2 } \\
& \text { KILL */DA3 }
\end{aligned}
$$

Before each file is deleted, the screen will show the file name, drive number, and ask: Delete? (Y/N/Q). Enter $(\bar{Y}$ to delete, $(N)$ to bypass, or $(Q)$ to return to TRSDOS. After you have deleted all the required files, type CREATE basename/KEY:d NGRANS = 00 and press [ENTER]. (The small " d " stands for the appropriate drive number.)

When you create these new files, use the same data base name as the files still remaining on the diskette (e.g. Salesmen). The DAT, DA2, and DA3 files may require a slightly different creation procedure, depending on the LEN number. If the LEN is 256 , use exactly the same procedure as above:

CREATE basename/DAT:d NGRANS $=00$
CREATE basename/DA2:d NGRANS $=\varnothing 0$
CREATE basename/DA3:d NGRANS $=\varnothing 0$
If the LEN is not 256 on a particular file, then a special command is necessary on that particular file. Lets assume you want to redo SALESMEN/DAT which had a LEN of 70. You would type CREATE SALESMEN/DAT: LRL $=70$ NRECS $=\varnothing$.

Of course, Salesmen would be the data base name of your file. You woud then go to Option 6 on the Main Menu and expand as normal.

## Profile Plus's Features, A Reference Section

This section will briefly describe each of the features of Profile+. If you need further instruction, refer to the appropriate pages in Section II.

The features will be described in order as they appear on the Profile+ Menu. Additional features will be described at the end of the section.

## Profile Directory

Press (8) at the Menu to see a listing of all the Profile data bases you have entered. This can be used to make sure you are using the correct diskettes, and to check spelling of the data base names.

Hard Disk users of Profile+ must use another method to see the Directory. To see a listing of your data bases, first press $X$ to exit to TRSDOS-HD READY. Here you have a choice of two commands:

Enter: $(D] I](B) \subset \subset(M)[A] P$ to see a listing of your data bases in full directory format.

Enter: $(F) I \subset L \in(E) \subset(D)(M) \subset A \subset P$ to see an alphabetized listing of your data bases.

Pressing [ENTER will return you to the Menu.

## Define Data Formats

Press (1) at the Menu to begin defining or to review data formats for a data base. When you define data formats, you tell Profile+ the categories (or fields) that will appear in each data base segment, and how much space each field will take.

Data formats are defined using field numbers, field names/headings, and field lengths. The field number keeps each field separate from another. The name/heading is to describe the field. The field length is the number of characters that can be entered in a field.

Data bases are defined in segments. You can define up to four segments for each data base. Segment 1 always contains 85 characters (the number of characters available for assigning to fields). Segments 2 through 4 can have from 1 to 256 characters, depending on your needs. Using less than the 256 available spaces for a segment saves diskette space.

A single field in Segment 1 may be 85 characters maximum. A single field in Segments 2, 3, or 4 cannot be greater than 254 characters. There can be a maximum of 99 fields defined across all segments.

The placement of fields in a segment is important. The fields you want to use as sort fields - fields used to access your data - must be in Segment 1.

For example, if you want to be able to look through your records alphabetically by last name, Last Name must be a field in Segment 1. Another field in Segment 1 might be Amount Outstanding. This field could be used as a sort field to find records of persons having a balance due.

There is another important factor in field placement that is a little trickier to understand. In the printing sections of Profile + , you tell the program the length of the field you want to use for sorting. For example, suppose you were using Last Name as your sort field. Last Name is defined to have a field length of 15. You don't have to use 15 as the sort field length.

Using 15 tells the program to look in all available 15 spaces in the field for information. This alphabetizes a report by a certain field. You can use a smaller number (to be able to sort more records), or a greater number. Field placement is the key in using a greater length for sorting. If you choose a sorting length of 20, the program looks first at the 15 spaces in Last Name, then looks at the first five spaces in the next field.

If you had a field consecutively numbered after Last Name called First Name you can alphabetize by last and first name by using an extended sort field length. Thus, field placement is the key to sort by last and first name. Field
placement can also be used to numerically order a report, using both a serial number and a part number (if they are consecutive fields) as sort criteria.

The number of records that can be sorted is limited by the memory available. You cannot sort 20,000 records at one time. You must select one portion of the records at a time, such as zero through five of the first character of a zip code.

There is a formula which you can use to determine how many records you can sort at one time. To find the number of records that can be selected for sorting, take the length of your sort field, add two characters to this (needed by the program) and divide this number into your memory size $(26,000)$.

For example, if your sort field was Zip Code, you would add two (always needed by the program) to five the length of your zip code field). Your formula would be: 26,000 divided by 7 , which would give you a maximum of 3,714 records that could be sorted at one time.

As you can see, the longer your sort-field length, the fewer records you can sort at one time. A solution to this is to use only as many characters of the sort-field length as you need to differentiate your records.

During data definition, there are two other considerations which must be remembered:

1. Total Fields - Total Fields should be larger than the fields they are totaling. Make allowances for integers, decimals, and the possibility of a minus sign.
2. Date Fields - Date Fields are normally eight characters long (MM/DD/YY), but consider five character fields where they might be applicable (e.g. MM/DD, MM/YY, etc.).

## Associated Fields

Related fields can be associated into logical groups. These groups are treated as a single field for searching, sorting and selecting purposes. All fields in an associated group are processed when any member of the group is specified.

To associate fields, the headings must begin with an uppercase alphabetic letter followed by a right parenthesis. All fields that begin with the same letter/parenthesis combination will be members of the same associated field.

## Defining Fields in a Segment

To define fields in a segment, follow the prompts on your screen. The field numbers are controlled by the program. Profile+ automatically orders the fields consecutively from Segment 1 to Segment 4. The maximum field length is the most space you will need for data in a field.

Anytime you do not use all the available space for a field name, press ENTER to proceed. If you do not want to use all the space in a segment, press ENTER to end the segment. The segment will be stored and you will return to the Menu.

## Reviewing a Segment

To review the information you have entered into a segment, first go through the steps to take you to the Enter Segment Number prompt. Enter the number of a segment you have already defined. The segment will be displayed on your screen.

You then have your choice of five options:
(H) - Hardcopy will give you a printout of the segment (make sure your printer is properly connected).
(A) - Replace will clear the segment and let you redefine the fields for the segment. If there is a change in the number of fields in the segment, all field numbers in following segments will automatically be put in consecutive order. All math, screen, report, label, and selection formats will have to be changed manually.
(A) - Add lets you add fields to a segment if there is any available space. If you try to add fields and there is no more space, you will return to the Menu. Adding a field to Segment 1 will renumber all fields in Segment 2, 3, and 4. All math, report, screen, label, and selection formats will have to be changed accordingly.

BREAK - Exit. Press BREAK twice to return to the Menu.
(N) - Next Segment. Press $N$ to either define or review the next segment (not available from Segment 4).

## Define Screen Formats

Press (2) at the Menu to define screens for your data base. A screen designs the way your fields will appear on the screen for the records in your data base. Profile+ lets you design up to five screens for each data base.

After you have answered the prompts, a blank screen will appear, with markings across the bottom. Place the fields in the screen in any order you wish. You do not have to place them in numerical order. But you must follow this format:

$$
\text { NNNNNNNNN Xnn } \square \square \square
$$

$N$ Stands for the field name. You do not have to use the exact name you gave the field in defining data formats.

X Stands for the field indicator. Indicators are described below.
$n n$ Stands for the field number. This must be the number the field was assigned while defining data formats. Fields 1 to 9 must not have a 0 in front (e.g. 01 is not allowed).

Marks the number of character spaces you must leave for the field length. Counting from the field type indicator, there must be the same number of characters as there are in the defined field length.

1 Marks the end of the field. This symbol is for your reference only and is not required. When the field number is equal to or longer the length of the field being defined, do not use this symbol. For example, Field 13, State, (defined to be two characters long) is simply defined as: $* 13$ (with no slash mark).

## Field Indicators

Field indicators tell the program the type of data the field will contain. The indicators are:

* Alphanumeric Field. A field containing any character.
\# Numeric Field. A field containing numbers, hyphens and decimal points.
. Decimal Field. A field containing decimal points.
! Protected Field. A field whose data cannot be altered directly.
+ Add To Field. A field that is added to another field.
- Subtract From Field. A field that is subtracted from another field.
\{ Date Field. Uses the format: MM/DD/YY. If you enter a $D$ as the date during data entry, the program will use the current date set at power up.
\} Date Field. Uses the format: YY/MM/DD. If you enter a $D$ as the date during data entry, the program will use the current date set at power up.
\& Date of Last Update Field. Uses the format MM/DD/YY. If you enter a as the date during data entry, the program will use the current date set at power up.
(@) Date of Last Update Field. Uses the format YY/MM/DD.
$<$ Must-Fill Alphanumeric Field. Alphanumeric data must be entered in this field or the program refuses to store the record.
$>$ Must-Fill Numeric Field. Numeric data must be entered in this field or the program refuses to store the record.
$\wedge$ Must-Fill Decimal Field. A decimal number must be entered in this field or the program refuses to store the record.
[ Must-Fill Date Field. A date in the format: MM/DD/YY must be entered in this field or the program refuses to store the record. If you enter a $D$ as the date during data entry, the program will use the current date set at power up.
] Must-Fill Date Field. A date in the format: YY/MM/DD must be entered in this field or the program refuses to store the record. If you enter a $D$ as the date during data entry, the program will use the current date set at power up.


## Designing the Screen

In designing the screen, there are several keys used to move the cursor around the screen. If you are unfamiliar with these keys, refer to Section II or Appendix A.

After fields are placed on the screen, there are several options available to highlight or alter the screen. These are:

The Reversed Lettering Option - This option will fill in parts of the screen with white spaces. It will also set type in reverse (black type in white boxes). To turn on the option, hold down CTRL and press (Z). Use the spacebar to type white space, the other keys to type black characters in white boxes. (CTRLCY turns the option off.

In the normal mode, C F D duplicates the character at the current cursor position and moves the remainder of the line to the right. (F2) deletes the character at the current cursor position and moves all the remaining characters on the line to the left.
(F1) and F2) and the Reversed Lettering Option - Pressing F1] while the option is on will scroll a solid white line across the screen in the line the cursor is on. (F2) is deactivated while this option is on.

After the Reverse Lettering Option has been used, and is off, (F1) and (F2) act differently when the cursor is positioned relative to reverse lettering. When the cursor is to the left of a block of reverse type, pressing (F1) will erase it one space at a time. The cursor must be to the right of a reversed block to move the remainder of the line to the left using the (F2) key.

Adding and Deleting Lines - CTRLCD moves line the cursor is on and every line below it down one line (erasing the last line). CTRLUU moves every line below the cursor up one line, deleting the line the cursor is on.
[ESC stores the newly formatted or updated screen. BREAK restores the screen to its original state. Screens can be updated by calling them up, making any changes, and pressing ESC.

## Duplicating Screens, Reports, Label and Selection Formats

If you need to create a screen similar to an existing screen (with additional fields or with some fields left out for security purposes), the best way is to go to TRSDOS and:

> COPY basename/PMP TO basename/PM2

This command would copy Screen 1 (extension PMP) of a data base to create Screen 2 (extension PM2) of a data base.

You could then return to Profile+, call up Screen 2 (PM2) and make the necessary changes. This could be used to add fields, delete fields, or protect fields for security. This procedure also works for report formats, label formats, and selection formats.

The following chart shows the extensions to add to your data base names for this procedure.

## Extensions Chart

Format
Extension to be Added to Data Base Name

|  | 1 | 2 | 3 | 4 | 5 |
| :--- | :--- | :--- | :--- | :--- | :--- |
| SCREEN | /PMP | /PM2 | /PM3 | /PM4 | /PM5 |
| REPORT | /PRT | /PR2 | /PR3 | /PR4 | /PR5 |
| LABEL | /LB1 | /LB2 | /LB3 | /LB4 | /LB5 |
| SELECTOR | /SL1 | ISL2 | ISL3 | /SL4 | ISL5 |

## Define Report Formats

Press (3) at the Menu to Define Report Formats. You can define up to five report formats for each data base. Reports can be created to show all aspects of information in your records.

Reports can be up to 132 spaces wide, but the screen is only 80 columns wide. To see the second portion of the screen, press TAB. CNTER takes you to the first portion of the next line. Report formats also use field indicators.

The report format screen is divided into three sections.
In the TITLE LINES section, there are three lines available to enter titles and the appropriate field indicators.

In the HEADINGS LINES section, there are two lines available to enter headings and the appropriate field indicators.

In the FIELD LINES section, there are two lines available to enter field numbers and the appropriate field indicators. If there is no data in the fields specified in the second line, the second line will be ignored.

The second line in the FIELD LINES section is useful for adding comments. You could set aside a comment field, indent a few spaces on the second line, and add the comment field number. If there is no comment for a particular record, the second line is ignored. If there is a comment, the program will print it underneath the record, and then skip a line before printing the next record.

All blank lines can be suppressed for output by placing a backslash (CTRL (9)) in the first character of the blank line.

Pressing ESC stores these formats.

## Report Field Indicators

The report format has three sections. These are shown below with the indicators that can be used in each.

TITLE LINES Three lines are available for entering titles:
[ Date. Prints the date and day of the week on the report. Allow 15 spaces with this indicator.
\# Page Number. Prints consecutive page numbers on a report (1, 2, 3, etc.). If the word Page is typed before \# on the report, Page 1, Page 2, Page 3, etc. will be printed. Allow five spaces with this indicator.

## Define Report Formats (continued)

? Sort-field Field Type. Prints the sort key used in running the report. In a TITLE LINE, this indicator prints the sort field value for the first record on the page.

HEADING LINES Two lines are available for headings:
[ Date. Prints the date and day of the week on the report. Allow 15 spaces with this indicator.
\& Page Number. Prints consecutive page numbers on a report. (1, 2, 3, etc.). If the word Page is typed before $\#$ on the report, Page 1, Page 2, Page 3, etc. will be printed. Allow five spaces with this indicator.
? Sort-field Field Type. Prints the sort key used in running the report. Used in a HEADING LINE, this indicator prints the name of the sort field.

FIELD LINES Two lines are available for fields. Field indicators and field numbers are entered here:

* Alphanumeric Field.
$=$ Total Field. Indicates that the column will be totaled after the last record's information is printed on each page.
(a) Record Number. Prints the record number on a report if the record is used in the report.
? Sort-field Field Type. Prints the sort key used in running the report. Used in a FIELD LINE, this indicator prints the value each record was sorted on.


## Control Breaks, Line Suppression, and Total Lines

When you press ESC to store a report format, you are asked to enter a Control Break. A Control Break field is not required, but lets you divide a report into several pages. For each different value in the field used for the Control Break, a different report page is printed. These fields must be in Segment 1.

Pressing [ENTER instead of entering a field number at the Control Break prompt will cause the report to be printed with as many items on a page as possible.

If you do not use a line when creating a report format, the printer will still generate a line feed and cause a blank line to be printed. Blank lines in the TITLE and HEADING LINES sections of a report may be suppressed by entering a backslash in the first space of the line. A backslash is made by holding down CTRL and pressing (9) (this must be the only character in the line).

In the FIELD LINES section, CTRL 9 has a different use. You can use the backslash to print a report that shows totals, but not the individual statistics.
To do this, press CTRL (9) to place a backslash in the first space of your field line (it is entered on the same line as your field numbers). This will cause only the final totals of the field numbers entered with the total, $=$, indicator to be printed on the report.

You can also use C T RL (9) in the FIELD LINES section to insert a blank line between entries in the report. To do this, use CTRL 9 to place a backslash in the first space of a blank second line in your FIELD LINES section.

## Define Label Formats

Press 44 at the Menu to Define Label Formats. As with report formats, you can define five label formats. The format screen looks and acts like the report format screen, except it only contains the Field Lines Section.

You can format labels between one and eight lines long. Four field indicators are used:

* Alphanumeric Field.
@ Record Number.
< Pushes the data in the field left, one space from the data of the previous field.
? Prints the value the labels were sorted on.
ESC stores these formats.


## Define Selection Formats

Press (5) at the Menu to Define Selection Formats. To use this feature, you must have at least two disk drives and a SCRIPSIT diskette. Selection formats tell Profile+ what data you want to extract from your records to merge with a SCRIPSIT document. This allows you to print form letters.

You can define up to five formats. The screen has two columns for you to enter data in: Extracted Field Name and Profile Field \#.

What you name your field in the first column doesn't have to match its data format name, but this same name must be used in the SCRIPSIT document to refer to the field. The field number must be the field number assigned in Define Data Formats and can be from any segment of the file.
(ESC) records the format. BREAK restores it to its former format.
Important Note: If you change the selection format in any way, you must reselect the records for the merge to work. You must also reselect the records if you have changed or added any data that is to be included in the merge.

## Expand Existing File

Press (6) at the Menu for Expand Existing File. Before you can enter any data in records for your data base, you must expand the file. Expanding tells the program how much room on the diskette to set aside for this data base.

The screen will tell you how many records the data base is currently allocated and ask how many you want to add. Never expand them to the maximum capacity in one step - you cannot expand beyond the capacity of your diskettes.

The more records you create for your data base, the longer the program takes to run. So, do not expand to a number far greater than the number you will presently use.

You can expand a one segment data base across one to four drives. Once a second segment is defined on a second drive, you can expand the data base only to the capacity of the diskettes you have utilized.

Anytime you add a segment with Define Data Formats, you must reexpand your file to cover the changes. If you do not want additional records, you can return to the Menu by pressing CBREAK twice.

## Expansion Capacities

Floppy Diskettes Capacities
\# of Drives

| \# of Segments | 1 | 2 | 3 |
| :---: | :---: | :---: | ---: |
| 1 | 3000 | 9000 | 14,600 |
| 2 | 800 | 1800 | $*$ |
| 3 | 400 | 900 | 1800 |
| 4 | 300 | 600 | 900 |

## Hard Disk Capacities

\# of Drives

| \# of Segments | $\mathbf{1}$ | $\mathbf{2}^{*}$ | $\mathbf{3}^{*}$ |
| :---: | :---: | ---: | ---: |
| 1 | 64,536 | ${ }^{*}$ | $*$ |
| 2 | 25,000 | 34,600 | $*$ |
| 3 | 13,000 | 17,300 | 34,600 |
| 4 | 9,900 | 17,300 | 17,300 |

Note: The asterisks in the charts indicate that the drive cannot be used for expansion.

## Inquire, Update, Add

Press 7 at the Menu for Inquire, Update, and Add. Data is entered, updated, deleted, and searched in this stage. Activity in this stage is controlled from three prompts, passed among by pressing (ENTER):

Enter Record Number - Entering a record number here will take you directly to that record. Pressing (ENTER here will take you to the Enter Scan Field Number prompt.

Enter Scan Field Number - Lets you select a field and specific data to order your file for your search. After a scan's last match is displayed, you return to Enter Record Number. Upper/lowercase differences in data are ignored during the search.

Add Records (Y/N) - Takes you to the first blank record. Until you stop the process by pressing BREAK, or until you reach the last record, you can continue to fill records with data.

Once you have created an Index (a Profile+ Menu feature), the prompt Index By appears between the first two. A wild card entry $=$ is only valid as the first character and can be used to display the first logical record. (Dand (1) take you to the next or the previous indexed record.

If you enter a search value here that does not have a match in your records, you will be prompted to enter another search value. Numeric search values must be right-justified. Numeric data is sorted in ascending order.

## Enter Record Number

Records accessed from this prompt appear on the screen with the following options listed at the bottom of the screen:
(D) - Delete - Let's you delete a record. This record can be filled again from either the Enter Record Number or the Add Records prompt.
(H) - Hardcopy - If your printer is properly connected, a copy of the record will be printed.
(U) - Update - Puts you in the Update Mode which allows you to add or alter information in a record. ESC records the changes, BREAK restores the record to its former state.
(x - Ends the current scan and takes you to Enter Record Number.
ENTER - Is used in scanning. It takes you to the next record that meets the determined criteria.
$\qquad$ - Takes you to the next physical record on the diskette.- Takes you to the previous physical record on the diskette.

## Enter Scan Field Number

Segment 1 fields are available here as search categories with which to scan your records. Once you enter the field to scan by, you determine the data to look for, the relationship between the data entered and the data sought, and a connective. If you are unsure about scans, refer to Reviewing Records Using Scan Fields in Section II. This sub-section and the sub-sections following it have detailed explanations of the various kinds of scans.

The wild card symbol, $=$, is used to find records that contain any data at all in a certain field. Numbers used in a scan must be right-justified.

The same five options available at the Enter Record Number prompt appear here. You can press ( $D$ to delete a record, $(H$ to hardcopy, (U) to update, $X$ to end a scan, and ENTER to find the next match. $\square$ and $\square$ will take you to the next or previous physical record on the diskette.

If you have created math formulas (from Profile+ Menu), CTRL(R) (recalculate) also appears here. (CTRL)(A) will recalculate all formula results for all records specified and return you to Enter Record Number.

## Add Records

Answering $(\gamma)$ to this prompt takes you to the first empty record in the Update Mode. Once you have completed data entry, ESC records the record. BREAK restores it to its previous state and returns you to the five option command line.

If you press ESC), you will go to the next available record after the record is stored.

## Moving Among Records and Screens

Moving among records and screens is easy. Anytime Enter Selection is displayed at the bottom of a screen on which a record is displayed, up to seven keys may be used.Takes you to the following record number (See Note), with the same screen number.Takes you to the previous record number (See Note), with the same screen number.Takes you to Screen 1 for the record.
(2) Takes you to Screen 2 (if defined) for the record.Takes you to Screen 3 (if defined) for the record.
(4) Takes you to Screen 4 (if defined) for the record.
(5) Takes you to Screen 5 (if defined) for the record.

Note: Physical Record if you are in the Select Mode and Logical Record if you are in the Index Mode.

## Print Reports

Press (8) at the Menu to print reports. Before you enter the data base name for this portion of Profile+, you must tell the program the dimensions of the report to be printed. Responding with ENTER to the first three prompts will print a standard report that has 60 print lines per page (the minimum number for print lines per page is 11 ), 66 lines per page (the minimum number for lines per page is 11 ), and is 132 columns wide (the minimum number of columns is 1). If you are using any other dimensions, enter them.

After aligning the printer to the top of the form (the page), press (ENTER]. Enter the data base name and the report Format Number. If you are not using a Control Break, enter the Sort Field Number. If you are using a Control Break, you are now asked to enter the length for sorting.

The length for sorting can be the entire field length. The maximum sort in the Print Reports function is 28,000 characters. This is sometimes necessary if you want to alphabetize names. You can enter a number less than the field length. This allows a larger number of records to be sorted. For example, if you had a data base that had East, North, South and West as districts, you could use a sort length of one to have the report alphabetized by district (since each begins with a different letter). Upper/lowercase differences in data are ignored during sorting operations.

Using a sort length longer than the field length causes the program to sort by the first sort field and the field that is consecutively after it. Thus, if you had Field 1 defined as Part Number with a length of ten, and Field 2 as Manufacturer with a length of ten, you could sort the report by both fields, if you used a sort length of 20 . Two identical part numbers (with different manufacturers) would be printed, one after the other. The manufacturers would be listed in the correct order.

Enter Selection Field Number is next. This allows you to use the scan fields as you would in the Inquire, Update, Add mode. After you have finished defining how your report will print, the screen will show that it is sorting. Then it will show the number of records selected that meet the criteria.

After the first page of the report is printed, you have two options. If you press (C), the report will continue printing all following pages without any interruptions. If you press the SPACEBAR), the report will stop after each page (for printers that accept single sheets). $X$ will stop the printing.

## Print Labels

Press 9 at the Menu to print labels. As with report printing, the first prompts are to define the dimensions of the labels.

First, enter the number of lines per label. This number should be the total number of lines from the top line of one row of labels to the top line of the next row of labels. Allow for the lines between the labels.

If you select a shorter length than the length used in the label format, your label will be truncated to fit the number of lines specified here.

Next is the number of characters per line. This will depend on the labels you have purchased. The number of labels up is the number of labels across the width of the paper.

After you align the paper, you enter the data base name and format number. Then you can enter a sort field number. If you selected Zip Code as your sort field, the labels would be printed numerically by zip codes.

Next you can enter a selection field to further specify the labels you want printed (as you can in report printing).

Printing will stop after each line of labels is printed so that you can check label alignment or change envelopes (if you are printing envelopes). Pressing the spacebar will print one more row. When label alignment is correct, printing can be continuous by pressing $(C)$ at the prompt. $X$ cancels printing.

## Select Records

Press (A) at the Menu. Here, your data base records are selected to be merged with SCRIPSIT. Enter the data base name, and the selection format number.

Segment 1 fields are used as sort fields. Upper/lowercase differences in data are ignored during sorting. After this prompt, you enter the length for sorting. Next, you enter fields numbers to select by. Up to 16 field numbers can be entered here. If you use any RG relationships for a field, the field number must be entered twice.

The next screen has three columns. The first column is used to establish the AND/OR connective. AND will select only records meeting both criteria specified while OR will select records meeting either of the criteria specified.

Press [ENTER to assume AND. If you type anything in the first column, the program will assume OR.

Next enter the relationship. Then enter the data qualifications. If you want to use (R) (G) (to specify a Range), you must have the field number listed twice. The first time the field number occurs, enter (G)(E) as the relationship with the data that will be the lower limit of the search. The second time the field number occurs, enter [L[E as the relationship with the data that will be the upper limit of the search.

## Profile Plus Menu

Press + at the Menu. (You do not have to use Shift, $\leftrightarrows$ is also accepted). The Profile + Menu will appear as below:


1 - Press 1 to define your User Menus.
2 - Press (2) to define math formulas.
3 - Press (3) to build your index for sorting.
$M$ - Press (M) to return to the Profile II Menu.
U - Press (U) to go to the User Menu. If no User Menus have been created, you will be returned to TRSDOS.
$X$ - Press $X$ to exit to TRSDOS.
The Profile+ Menu accesses several advanced features of Profile+. These features are described in detail on the following pages.

## Profile Plus Menu (continued)

## Define User Menus

This feature lets you define customized menus that allow quick access to various parts of your file. To define User Menus, press (1) at the Profile+ Menu.

First, you must enter a menu name. You may not use special characters or embedded spaces. If no menu by that name is found, one will be created. If one is found, you will be allowed to update it.

Next you enter a Heading. This is the information that will appear at the top of the screen when this menu is displayed. The next six spaces are for an ID field. This is a good place to date the Menu. After these two fields are complete, press ESC to go to the next screen.

Here the options for the menu are created. Each menu may have up to 12 entries. The entries are entered in the form:
$\mathrm{K} \quad \prod 1111 \ldots \ldots .$.
PPPPPPPPP $\square\{\mathrm{FFFFFFF}, \mathrm{S}, \mathrm{H} H H H H H H \ldots\}$

These letters stand for:
K - The keystroke to invoke this function.
$T$ - The text describing this choice.
$P$ - The program name (for example, PRINT/EFC, CLERK/EFC, LABEL/EFC).
F - The data base name to be passed to the program. If it is not eight characters long, it must be padded with zeros. (For example, TEST0000)

S - The screen or format number to be used.
H - The heading to appear at the top of the screen during processing.
The braces are required. The only character permitted between the data base name, format number, and title is a comma.

Additional parameters may be passed to Profile+. These parameters are entered outside the braces in the user menu entries. To do this, you must use the program name K/EFC before the program name you are using.

Anytime you would press ENTER to respond to a prompt is denoted by $\mathbf{I}$. This symbol is made by CTRLCD. Anytime K/EFC is used, one I must be entered before you begin passing parameters.

A sample User Menu entry with parameters is:

$$
\begin{aligned}
& \text { R MONTHLY SALES REPORT } \\
& \text { K/EFC PRINT/EFC \{SALESMEN,1,E.E. MONTHLY SALES REPORT\} } \\
& \qquad \text { IIII\| } 085540000 \text {. IGT। }
\end{aligned}
$$

If your data base name (SALESMEN) is not eight characters long, it must be filled in with zeros (i.e. SALESØ00). For further information about passing parameters, refer to Passing Parameters to Profile+ in Section II.

Once you have defined entries for a User Menu, you must prepare it for access. Exit to TRSDOS. Type $B \subset(1)(D C D C U S E R$ and press ENTER.

The screen will show:
Enter command line $1-80$
Type the name of your User Menu, and press (ENTER three times.
The screen will show:

> Edit Complete. TRSDOS READY.

Press (M) and ENTER to return to the Profile II Menu.

## Define Math Formulas

At the Profile+ Menu, press (2). For each data base you may create one set of math formulas. You may have 16 formulas (up to 63 characters) in the set, each using up to 20 fields. Profile+ will perform addition, subtraction, multiplication, and division.

The screen is marked off in columns. The first column is used to enter the field number that will contain the computation's result. The second column is used to enter the formula for the field.

Only field numbers can be used in the first column. In the second column, four references can be used:

Fields - To use the value entered in a field as a part of a computation for another field, use the field number in a formula.

Values - To use a value that is not in a field, enter it in quotation marks.

Operators - These are the symbols for mathematic operations. They are:

+ for addition
- for subtraction
* for multiplication

1 for division
Format - The results of formulas are shown with two decimal places. If you want integer format, place an I anywhere in the body of the formula. To select a floating decimal point with no rounding, place the letter $F$ anywhere in the formula.

All mathematic operations are performed from left to right, and from top to bottom as the fields appear in the table. References to fields not yet calculated will be evaluated as zero. Previously calculated values are stored rounded to the format you have selected. All operations are performed to 11 digits of accuracy.

Two error conditions are recognized by math operations:
Division by Zero - /DO will be substituted for the result when division by zero is attempted.

Field Overflow - /OV will be substituted for the result when field overflow occurs.

For further information, refer to Defining Math Formulas in Section I.

## Build File Index

Press (3) at the Profile+ Menu. This feature lets you index your data base so that you can go through your records either alphabetically or numerically in logical record order in the Inquire, Update, Add mode.

You can index your data bases by any fields that are in Segment 1. After entering the data base name and the Field Number to Index By, press ENTER to use the entire field length. The Index is created.

The Index prompt will now appear after the Enter Record Number prompt of Inquire, Update, Add. To access all records that contain information in the designated field, use the wild-card symbol $\equiv$. This will display the first "logical" record.

Anytime you alter the field that you are using as your index, you must recreate the index.

## Killing Files

Pressing (K) at the Profile II Menu (even though it is not listed) will allow you to eliminate a data base.

You will be asked to enter the data base name. Then you will be asked if you are sure you want the data base killed. If you answer $(Y$, all portions of the data base will be killed. You will be returned to the Profile II Menu.

## Creating a Limited Menu

Profile+ lets you create diskettes that only allow limited access to your data bases. These diskettes can be used by someone that doesn't need the create functions, or is not security-cleared to access all of your data bases.

A Limited Menu only allows access to Inquire, Update, Add and to the print functions. This, along with password protection can offer you secure data.

To create a Limited Menu, exit to TRSDOS. Type $D$ D $\square$ LICM I T and press ENTER. The program will tell you that it is Installing Limited Profile Menu. Then, Press Any Key To Continue. (BREAK will cancel.)

To restore the Profile II Menu on a diskette that has a Limited Menu, exit to TRSDOS, type $D \subset \square(U \subset N \subset L \subset(M)(I)(T)$ and follow the instructions.

## Password Protection

After creating screen formats, report formats and label formats, you are given the option of password protecting the format. If you password protect a format, you will be required to enter the correct password before accessing it.

You must be careful to note whether you enter a password in upper or in lower case letters. The program will not accept one for the other. When you are asked to enter a password, what you type will appear as \#\#'s on the screen. This is to insure security.

Password protection used with a Limited Menu offers security for your data. If you password protect a format (but don't use a Limited Menu), your data is not very secure. A password can be eliminated or changed by calling up the format where it was entered and restoring the format either with a new password or with none.

To achieve maximum security, backup your Program diskette. Then lock up your original Program diskette, and create Limited or User Menus on your Backup. After this is done, kill all the "creation" programs on your Backup. See Appendix B for a list of these programs.

## Special Keys

In the different program options of Profile+, several keys have special uses. These keys and their uses are listed below.

## Overall Program

BREAK - Is used to exit the current mode, and to return to the Menu.
(BREAK must usually be pressed twice. If you press it once, and change your mind, press any other key to continue. If a format or record is being updated, and you want to restore it to its former state, BREAK will restore it.
(ESC - Is used to store formats and records.
(X) - Used from the Menu and the Profile+ Menu to exit to TRSDOS. $X$ is also used at the screen command line to return to Enter Record Number.

## Define Data Formats

## Defining a Segment

ENTER - Stores a response (if all character spaces are not used) and progresses to the next prompt. If ENTER is used as the only entry at Field Name, it will store the file definition segment and return to the Menu.

BREAK - Exits and returns to the Menu without making changes.

## Reviewing a Segment

[H] - Prints a Hardcopy of the segment.
(R) - Erases the fields in that segment and lets you begin again. If the number of fields in a segment is changed, and there are other segments following the one that was changed, all subsequent fields will be renumbered automatically. All screen, report, label, and math formats will have to be changed manually.
(A - Allows you to add fields to the segment if there is available space. All fields in following segments will be renumbered automatically. You must change all screen, report, label, math, and selection formats manually.

BREAK - Pressed twice takes you to the Menu and restores the original information if changes were made.
(N) - Takes you to the next segment (not available in the Segment 4 command line).

## Define Screen Formats

-     - Moves the cursor to the left one space.
$\rightarrow$ - Moves the cursor to the right one space.
(1) - Moves the cursor directly up one line.
(1) - Moves the cursor directly down one line.

BACKSPACE - Moves the cursor to the left one space, erasing any character beneath it.

BREAK - Restores the screen to its original state and returns to the Menu.
CTRLD - Moves the line the cursor is on and every line below it down one line, deleting the last line.

CTRLCU - Moves every line below the cursor up one line, deleting the line the cursor is on.

CTRL (Y) - Deactivates the Reversed Lettering Option.
CTRLZ - Activates the Reversed Lettering Option.
CTRL $Z$ and (F1 - Scrolls a thick white line across the screen.
ENTER - Moves the cursor to the beginning of the next line.
ESC - Stores the screen.
(F1 - Duplicates whatever character is in the space the cursor is on and moves the remainder of the line to the right one space. Deactivated inside a Reversed Lettering block. If next to a Reversed Lettering field character, F1 will erase the reversed characters to the right one character at a time.
(F2 - Deletes the character the cursor is on and moves the remainder of the line to the left one space. Deactivated inside a Reversed Lettering block.

SPACEBAR - Moves the cursor to the right one space, erasing any data beneath it.

TAB - Moves the cursor to the next position that is a multiple of eight from the left side of the screen.

## Keys Used in Define Report and Label Formats

Several keys respond as they would in defining screen formats. These are $\perp$, $(1),-(-)$, BACKSPACE, BREAK, ENTER, ESC), FD, (F2), and SPACEBAR).
(TAB - Takes you to the second half of the screen, to display spaces 54 to 132.

CTRL 9 - (Only for Report Formats) Used as the only character in a title or heading line, suppresses the line feed during printing. Used in a field line, CTRL 9 causes a summary report to be printed for $=$ fields.

## Keys Used in Inquire, Update, Add

From the Enter Record Number prompt, this command line is available:
(D) - Deletes the record.
(H) - Prints a copy of the record.
(U) - Takes you to the Update Mode.

In the Update mode:
ENTER - Moves you among fields from top to bottom.
HOLD - Inserts data in a field from the corresponding field in the last successfully stored record. This function will not work when screens are changed.- Moves you to the first character of the previous field.
(D - Moves you to the first character of the next field.

-     - Moves you left one character inside a field. At the start of a field, moves you to the first space in the previous field.
-     - Moves you right one character in a field. At the end of a field, $\triangle$ moves you to the first space in the next field.

TAB - Moves you to the first space in the first field.
ESC - Records changes.
BREAK - (pressed twice) Takes you back to the command line.
(X) - Takes you to Enter Record Number prompt.

ENTER - Continues scan for next match of selection. If no matches are found, takes you to the Enter Record Number prompt.
(2) - Takes you to Screen 2, if defined.
(3) Takes you to Screen 3 , if defined.
(4) - Takes you to Screen 4, if defined.
(5) - Takes you to Screen 5, if defined.
(D - Takes you to the next record (See Note). If none, returns you to the Enter Record Number prompt.
(I) - Takes you to the previous record (See Note). If none, returns you to the Enter Record Number prompt.

Note: In the Scan Mode, this would be a physical record. In the Index Mode, this would be a logical record.

## From Index By

$\equiv$ - Displays the lowest alphabetical or numerical record (depending on the index sort field). Once the first record is displayed, the same keys available for Enter Record Number are available. The arrow keys would move you in logical order, not physical order.

## From Enter Scan Field Number

Once a record is accessed, the keys available for Enter Record Number are available here, with these exceptions:
(X) - Ends a scan, returning you to Enter Record Number.
(ENTER - Displays the next match in the scan. If none are found, returns you to Enter Record Number.

Arrow keys work in physical order of records, not logical order.
If math formulas for the file have been defined, another key is available here:
(CTRL) - Recalculates all formula data in a data base for records specified, returning you to Enter Record Number.

## Appendix A - Special Keys (continued)

## From Add Records

Once a record is accessed from Add Records, you have the choices listed under the Update function of Enter Record Number.

ESC - Stores the data entered and looks for the next available blank record.
BREAK - Exits the Add mode of the record displayed and returns to the command line.

## Programs Used by Profile Plus

Entering (D)(I) from TRSDOS READY gives you a listing of the programs used to run Profile+. Below are the programs and what each does.

DIR/EFC - Generates the Profile II directory seen by pressing ( $)$ at the Profile II Menu.

CREATEM/EFC - Creates the Math Formula Option of the Profile + Menu. The formulas are stored in the program: basename/MTH. This file will be placed on the same diskette that contains basename/MAP The user should never separate these two files. See following section "Notes for Maximum File Space on the Diskette."

MAKEMENU/EFC - Creates User Menus. See following section "Notes for Maximum File Space on the Diskette."

MENUPLUS/EFC - Is the Profile+ Menu. See following section "Notes for Maximum File Space on the Diskette."

INDEX/EFC - Builds the Index. Creates the program: basename/IXI
CREATE/EFC - Generates:
basename/MAP - Defines file structure.
basename/KEY - Holds the data in Segment 1.
basename/DAT - Holds the data in Segment 2.
basename/DA2 - Holds the data in Segment 3.
basename/DA3 - Holds the data in Segment 4.
See following section "Notes for Maximum File Space on the Diskette."
CREATEX/EFC - Generates the screens:
basename/PMP - Screen 1.
basename/PM2 - Screen 2.
basename/PM3 - Screen 3.
basename/PM4 - Screen 4.
basename/PM5 - Screen 5.
See following section "Notes for Maximum File Space on the Diskette."

## Appendix B - Programs Used by Profile Plus (continued)

```
LPFORM/EFC - Defines the Report Formats:
basename/PRT - Defines Report Format 1.
basename/PR2 - Defines Report Format 2.
basename/PR3 - Defines Report Format }3
basename/PR4 - Defines Report Format 4.
basename/PR5 - Defines Report Format 5.
```

See following section "Notes for Maximum File Space on the Diskette."
LBFORM/EFC - Defines the Label Formats:
basename/LB1 - Defines Label Format 1.
basename/LB2 - Defines Label Format 2.
basename/LB3 - Defines Label Format 3.
basename/LB4 - Defines Label Format 4.
basename/LB5 - Defines Label Format 5.
See following section "Notes for Maximum File Space on the Diskette."
FIELDER/EFC - Defines the fields you will extract for merging with SCRIPSIT.

```
basename/SL1 - Selection Format 1.
basename/SL2 - Selection Format }2
basename/SL3 - Selection Format }3
basename/SL4 - Selection Format }4
basename/SL5 - Selection Format 5.
```

See following section "Notes for Maximum File Space on the Diskette."
EXPAND/EFC - Defines File Expansion. When a single-segment data base fills a diskette, this can create:
basename $/ \mathrm{KX1}$ - Expanding to Drive 1.
basename/KX2 - Expanding to Drive 2.
basename/KX3 - Expanding to Drive 3.
CLERK/EFC - Runs the main part of Profile+. This runs the Inquire, Update, Add mode, and the Index.

PRINT/EFC - Prints the reports, combining formats and data. This also uses PRT through PR5,

LABEL/EFC - Combines Label Formats and data to print labels. This also uses LB1 through LB5.

See following section "Notes for Maximum File Space on the Diskette."

## Appendix B — Programs Used by Profile Plus (continued)

SELECTOR/EFC - Makes the record selections for merging with SCRIPSIT:
basename/SR1 - Uses Selection Format 1 (basename/SL1).
basename/SR2 - Uses Selection Format 2 (basename/SL2).
basename/SR3 - Uses Selection Format 3 (basename/SL3).
basename/SR4 - Uses Selection Format 4 (basename/SL4).
basename/SR5 - Uses Selection Format 5 (basename/SL5).
See following section "Notes for Maximum File Space on the Diskette."
EXECUTE/EFC - Name of the Menu for the Limited Menu option. Creates a Limited Menu program or module. This will be renamed to $M$ when you use DO LIMIT (see MMENU below). See following section "Notes for Maximum File Space on the Diskette."

MMENU/EFC - Created when you use DO LIMIT. This is the Limited Menu program.

K/EFC - Use of single key entry to bypass multiple steps. Used in User Menus.
M - Profile II Main Menu.
BASIC - Allows BASIC programs to be created. See following section "Notes for Maximum File Space on the Diskette."

SELECT/BAS - Is a program coded in BASIC. It allows you to view on the screen records selected by function A on the Menu. It will read basename/SRI through /SR5.

## Notes for Maximum File Space on the Diskette

The programs listed below are Creation Programs. To create the maximum amount of room on the diskette for your records, you can kill these programs after set-up is finished and completely checked out. If they are needed later, they can be copied back onto the Working diskette from the Master diskette:

CREATEM/EFC
MAKEMENU/EFC
MENUPLUS/EFC
CREATE/EFC
CREATEX/EFC
LPFORM/EFC
LBFORM/EFC

## Appendix B - Programs Used by Profile Plus (continued)

Here is a list of other programs with their functions that can be killed to create more diskette space if not needed:

FIELDER/EFC and SELECTOR/EFC - If you are not using the SCRIPSIT diskette for merging to create form letters, you can kill these programs for more diskette space.

LABEL/EFC - Can be killed for more diskette space if you will not be printing labels.

EXECUTE/EFC - Can be killed to create more diskette space if Limited Menus are not needed.

BASIC - This program can be killed if Basic is not needed, but it cannot be copied back onto the diskette.

## Sample Printouts

This appendix contains, in the order that they occur, printouts of all aspects of the Salesmen file that were not illustrated in Section II. They follow in this order:

1. Segment 1
2. Segment 2
3. Segment 3
4. Segment 4
5. Segment 4 Revised to Add Month
6. Screen 1 Updated to Include Month field
7. Math Formulas

8a. Record 1 - Screen 1
b. Record 1 - Screen 2

9a. Record 2 - Screen 1
b. Record 2 - Screen 2

10a. Record 3 - Screen 1
b. Record 3 - Screen 2

11a. Record 4 - Screen 1
b. Record 4 - Screen 2

12a. Record 5 - Screen 1
b. Record 5 - Screen 2
13. Report 1 - Sorted by Position
14. Label Format 1
15. Labels Printed from Format 1
16. Selection Format 1
17. Printing User Menu Screen for "Printing"
18. Printing Menu for "Printing"

## Appendix C - Sample Printouts (continued)

## 1. Segment 1



## 2. Segment 2



## Appendix C－Sample Printouts（continued）

## 3．Segment 3



## 4．Segment 4

| Field Number | －Field Heading | － | Field Length |
| :---: | :---: | :---: | :---: |
| 31 | LS Units |  | ロロロロ7 |
| 32 | DH Unats |  | 00007 |
| 33 | H Units |  | 0．0007 |
| 34 | L3 Amt |  | めめめめの |
| 35 | DH Amt |  | ロ0009 |
| 36 | H Amt |  | 90009 |
| ＞Enter Selection |  |  |  |
| पcony，R Repres | ie，A Add Fields， | PEAK |  |

## Appendix C - Sample Printouts (continued)

## 5. Segment 4 Revised to Add Month



## 6. Screen 1 Updated to Include Month field



## Appendix C - Sample Printouts (continued)

## 7. Math Formulas

|  | Enter Math Field Definitions: |
| :---: | :---: |
| 31 | $=14 * ⿻ 7.72^{\prime \prime}$ |
| 32 | $=15 * " 36$ " |
| 3.3 | $=16 * * 24$ " |
|  | $=131+32+33$ |
| 34 | $=4 * " 30000$ |
| 35 | $=5 * 1750{ }^{\prime \prime}$ |
| 36 | = $8 * 口 12001$ |
| 8 | $=34+35+36$ |
| 9 | $=8 * " .05 "$ |
|  | $=118+19+20+21+22+23+24+25+26+27+28+29$ |
|  | $=$ |
|  | $=$ |
|  | $=$ |
|  | $=$ |
|  | $=$ |
|  | $=$ |

## Appendix C - Sample Printouts (continued)

## 8a. Record 1 - Screen 1



## b. Record 1 - Screen 2



## 9a. Record 2 - Screen 1



## b. Record 2 - Screen 2

Erirachment Encrlafedias, Iric.
Total Units Sold Report for 1981

| Name, Last: | Kiltor | Pasitiar: | Dist. Mari. |
| :---: | :---: | :---: | :---: |
| First Name: | Kelly | District: | Northside |
| Street | 124 Devidsan Dr | Hired | 10/01/78 |
| Citr | Fort Worth |  |  |
| State | TX |  |  |
| Lip Code | 76110 |  |  |
| Phorie | 817-926-6385 |  |  |

Total Units Sold

Record \# DDODZ Sireen \# $2 \quad$ Enter Selection.
Press D-Delete, H-Hardcapy, U -UFdate, $x$-End Scar, or ENTER -Nezt Match

## Appendix C - Sample Printouts (continued)

## 10a. Record 3 - Screen 1



## b. Record 3 - Screen 2

| Name, Last: | Thomason | Position: | Sales |
| :---: | :---: | :---: | :---: |
| First Name: | Brenda | District: | Westside |
| Street : | 1643 Overton | Hired | 12/01/80 |
| citr : | Fort Worth |  |  |
| State | TX |  |  |
| Zip Cade : | 87129 |  |  |
| Phone | 817-336-8291 |  |  |

Total Units Sold

| Total Sales br Unit: | 2682 | (Current Sales: |  |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- |

## 11a. Record 4 - Screen 1



## b. Record 4 - Screen 2



## 12a. Record 5 - Screen 1



## b. Record 5 - Screen 2

Enirichment Encrlapedias, Inc.
Total Units Sold Report for 1981

| Name, Last: | Putrami | Position: Sales |  |
| :--- | :--- | :--- | :--- |
| First Name: | Jeannie | District: Westside |  |
| sitreet $:$ | 497 Weston Ave. | Hired | Di/Di/81 |
| Citr | $:$ | Fort Worth |  |
| State $:$ | $T X$ |  |  |
| Zip Code | 76110 |  |  |



## Appendix C - Sample Printouts (continued)

## 13. Report 1 - Sorted by Position

|  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| How F-re it | 174. |  |  |  |  |  |  |  |  | Fate |
|  | Notane is Prio. | tialpinum |  | Suley f Aвmutir |  | Comunise fors |  |  | 14 | fiets |
|  | 3050, | H11tun | Pi, t. Mati. |  | 108. | Scza.ax | 6 | 1. |  | 7 |
|  | -6.4594 | A) ber tern | iliot, Min. | 1-146.6.36 | Hat | 1185.80 | $t$ | 14. |  | 1 |
|  | Efters |  | tidy | 35\%\%61. 60 | 280 | 1787 | $\cdots$ | $\checkmark$ |  | 14 |
|  | \|2") | f teowa (en) | $3+1$. |  | -2.7\% | 1.40.ab | $\approx$ | 31 |  | 4 |
|  | 85,454\% | Tutinat | Sster | 15156.96 | स स1E: | ※\%\%, ter | 2 | $\%$ |  | $s$ |
|  |  |  |  | 1 - 1 ¢18.68 | $59 \%-$ | H69\%. 3 - | $\triangle 1$ | t. |  | $\%$ |

## 14. Label Format 1



Press ESC To Recors Label Format, BREAK To Cancel

## 15. Labels Printed from Format 1



## 16. Selection Format 1

| DEFINE SELECTION FORMATS |  |
| :---: | :---: | :---: |
| Extracted Field Name | Profilefield \# |
| LAST | -3 |
| FIRST | 10 |
| STREET | 11 |
| CITY | 12 |
| STATE | 13 |
| ZIP | 14 |
| SALES | 8 |

Press ESC To Record Changes, BREAK To Cancel

## 17. Printing User Menu Screen for "Printing"

$R$ MONTHLY SALES REPORT
K/EFC PRINT/EFC (SALESMEN, 1,E. E. MONTHLY SALES REPORT): : : : : 08 4ODDD. $G T$ $M$ PROFILE II MENU
M

## 18. Printing Menu for "Printing"

```
R - MONTHLY SALES REPORT
M - PROFILE II MENU
x - Exit
```


## Fine Tuning Profile Plus

Technically minded users who wish to further customize Profile+ may apply any or all of the following patches. To remove an applied patch, simply reverse the arguments found after the $F=$ and $C=$ parameters.

## Inquire, Update, and Add

1. To eliminate the "Record Number" mode:

PATCH CLERK/EFC $A=5306, F=21 \mathrm{~F} 046, \mathrm{C}=\mathrm{C} 3072 \mathrm{~B}$
2. To eliminate the "Index By" mode:

PATCH CLERK/EFC $A=2 B 07, F=3 A 6228, C=C 3 E 853$
3. To eliminate the "Scan" mode:

PATCH CLERK/EFC $A=53 E 8, F=C D B 063, C=C 38054$
4. To eliminate the "Add Records" mode:

PATCH CLERK/EFC $A=5480, F=$ CDB063, $C=$ C3A852
5. To prevent the user from updating records:

PATCH CLERK/EFC $A=5 D 7 A, F=C A 8361, C=000000$
6. To prevent the user from deleting records:

PATCH CLERK/EFC $A=5 D 75, F=C A D 95 D, C=000000$

## Print Reports

1. To change sort from ascending to descending:* PATCH PRINT/EFC $A=31 E 1, F=F A, C=F 2$

* Note: If room on the diskette permits, and you must print some reports ascending and some descending, COPY PRINT/EFC to PRINTD/EFC. Then patch PRINTD/EFC for descending.

2. To exit program and return to the Menu after printing a report:

PATCH PRINT/EFC $\mathrm{A}=521 \mathrm{D}, \mathrm{F}=\mathrm{CABE} 49, \mathrm{C}=000000$
PATCH PRINT/EFC $A=54 F \emptyset, F=C A 484 E, C=C A B 451$
PATCH PRINT/EFC $\mathrm{A}=55 \mathrm{E} 2, \mathrm{~F}=\mathrm{C} 3484 \mathrm{E}, \mathrm{C}=\mathrm{C} 3 \mathrm{~B} 451$

## Appendix D - Fine Tuning Profile Plus (continued)

3. To eliminate:
single sheet option:
PATCH PRINT/EFC $A=287 A, F=C 0, C=C 9$
number of lines to print:
PATCH PRINT/EFC $A=3 B 00, F=21 D B 37, C=C 31 F 3 B$
number of lines per page:
PATCH PRINT/EFC $A=3 B 25, F=21$ AA38, $\mathrm{C}=\mathrm{C} 33 \mathrm{~B} 3 \mathrm{~B}$
width of page:
PATCH PRINT/EFC $A=3 B 4 D, F=212539, C=C 3633 B$
printer alignment message:
PATCH PRINT/EFC $A=3 B B 8, F=21 A 439, C=C 3 C 63 B$
4. To change printer default values:
(user must replace XX with value in hexadecimal)*
number of lines to print:
PATCH PRINT/EFC $A=3 B 20, F=3 C, C=X X$
number of lines per page:
PATCH PRINT/EFC $\mathrm{A}=3 \mathrm{~B} 3 \mathrm{C}, \mathrm{F}=42, \mathrm{C}=\mathrm{XX}$
width of page:
PATCH PRINT/EFC $A=3 B 64, F=84, C=X X$

* Note: For the proper hexadecimal code, refer to the Appendix of the Model II TRSDOS Reference manual. Utilizing this will change the default value that the system will use, but will not change the "displayed" default prompt.


## Print Labels

1. To change sort from ascending to descending: PATCH LABEL/EFC $A=31 D C, F=F A, C=F 2$
2. To exit program after printing a set of labels:

PATCH LABEL/EFC $A=558 B, F=C A F 64 B, C=000000$
PATCH LABEL/EFC $A=5881, F=C A 1752, C=C A 3055$
PATCH LABEL/EFC $A=5 D A C, F=C 21752, C=C 23055$

## Appendix D - Fine Tuning Profile Plus (continued)

3. To eliminate printer setup questions:
number of lines per label:
PATCH LABEL/EFC A $=4 \mathrm{C} 97, F=219845, C=C 3 A D 4 C$
number of characters per line:
PATCH LABEL/EFC $A=4 C B F, F=210 E 46, C=C 3 D 84 C$
number of labels across:
PATCH LABEL/EFC A $=4$ CD8 $, F=21 E 845, C=C 3 F A 4 C$
PATCH LABEL/EFC $A=4 C F A, F=C D 885 F, C=21 X X 00{ }^{\circ}$

- Note: Replace XX with the number of labels across. Enter the number as a hexadecimal. For the proper hexadecimal value, refer to the Appendix of the Model II TRSDOS Reference manual.

4. To change printer setup defaults:
(user must replace XX with value in hexadecimal)
width of printer:
PATCH LABEL/EFC $A=4 C 57, F=84, C=X X$
number of lines per label:
PATCH LABEL/EFC $A=4 C A E, F=\emptyset 6, C=X X$
5. To eliminate single sheet mode:

PATCH LABEL/EFC $\mathrm{A}=2837, \mathrm{~F}=\mathrm{C} 2, \mathrm{C}=\mathrm{C} 3$

## Select Records

1. To allow type-ahead:

PATCH SELECTOR/EFC $A=3821, F=C F, C=00$
PATCH SELECTOR/EFC $A=5 E D D, F=C F, C=\emptyset 0$

## Hard Disk Instructions

If you have a Hard Disk system, you must copy all of the Profile+ programs to Hard Disk. To do this, use the FCOPY instructions in your Hard Disk Owner's Manual. Refer to the Save and Restore sections in your Hard Disk manual to make backups when using Hard Disks.

There is one restriction on the operation of Profile+ on the Hard Disk. Profile II Menu Option 0 - the Profile Directory - will not function on Hard Disk. In order for the user to obtain a directory listing of the Profile+ data bases he has created on Hard Disk, the user must, from the TRSDOS READY-HD message prompt, enter an appropriate DIR or FILES command as follows:

```
DIR */MAP
FILES */MAP
```

The DIR command will list the data base names in full directory format.
The FILES command will list the data base names in alphabetical order.
If you are a Profile+ user and also use other Radio Shack software packages which utilize Profile as a program base, there is a potential conflict between the use of the file name of the Profile+ Main Menu (named "M" - see Appendix B), and the name of the menu used in these other software packages. The following patches may be used to change the Main Menu name from " M " to any alphabetical character desired. (The patches in this example are designed to change the Menu name from " $M$ " to "A.") Substitute the hexadecimal value of the alphabetical character desired. See the Appendix of the Model II TRSDOS Reference Manual for the hexadecimal values of " A " through " Z ."

## Patches Used to Rename Menus

```
PATCH DIR
PATCH CREATE/EFC
PATCH CREATEX/EFC
PATCH LPFORM/EFC
PATCH LBFORM/EFC
PATCH FIELDER/EFC
PATCH EXPAND/EFC
PATCH CLERK/EFC
PATCH PRINT/EFC
PATCH LABEL/EFC
PATCH SELECTOR/EFC
PATCH MAKEMENU/EFC
PATCH CREATEM/EFC
PATCH INDEX/EFC
```

$$
\begin{aligned}
& A=4817, F=4 D, C=41 \\
& A=569 B, F=4 D, C=41 \\
& A=4 B C 3, F=4 D, C=41 \\
& A=5170, F=4 D, C=41 \\
& A=4 C 3 A, F=4 D, C=41 \\
& A=4 F 05, F=4 D, C=41 \\
& A=3 C 33, F=4 D, C=41 \\
& A=5736, F=4 D, C=41 \\
& A=5228, F=4 D, C=41 \\
& A=5596, F=4 D, C=41 \\
& A=56 D B, F=4 D, C=41 \\
& A=5 C 52, F=4 D, C=41 \\
& A=51 B 3, F=4 D, C=41 \\
& A=2 F 1 A, F=4 D, C=41
\end{aligned}
$$

## Glossary of Terms

Alphanumeric - A combination of alphabetical and numerical characters.
Associated Fields - Fields that are related as a group for scan, search and selection purposes. Also see: Field, Scan Field, Search and Selection Field.

Backup - A TRSDOS program utility used to make extra copies of diskettes as a safety measure in case the original diskette is damaged.

Basename - The unique eight character name used to identify your data base.
Character - Any letter, symbol, or figure made by a single keystroke.
Command Line - A line of program options that appears at the bottom of a screen.

Connective - Optional input that lets you further specify search criteria in scanning and selecting. AND tells the program to match both sets of criteria before selecting a record for a match. OR tells the program to select a record if either criterion matches.

Control Break - A field that is used to separate a report into pages, with each different data set of a field on a separate page.

Data Base Name - The name you create to describe your set of records. A Data Base Name may be up to eight characters long, with no special characters or embedded spaces. It is also referred to as a File Name by Profile + .

Decimal Number - A number containing a decimal point and digits to the right of it.

Delete - A method of erasing data.
Destination Diskette - The diskette that information is being transferred to.
Directory - A listing of program or system files. In Profile+, typing [DCIDA at TRSDOS gives a listing of the system files that make up Profile+ (plus files made to create portions of your file structure). Pressing (D) at the Profile II Menu, gives a listing of the data bases you have created in Profile+.

Enter - Refers to data input that is concluded by pressing the ENTER key.

Field - A category used to describe data to be entered in a record. A field is a basic unit of Profile+. A sample field is Last Name.

Field Indicator - A symbol that you enter that tells Profile+ the type of data that a field will hold. Some field indicators are Must-fill indicators - Profile+ will not store a record if these fields are not completed.

Format - 1) A method of telling the program the arrangement of data or fields. 2) A program that prepares diskettes to hold information.

Hardcopy - A printout of a screen. Profile+ allows you to make hardcopies of records, screen formats, file definitions, and math formulas.

Integer - A whole number or zero. Integers are numbers without decimal places.

Kill - A method of erasing an entire data base.
Limited Menu - An option that lets you create diskettes without the create functions of Profile+.

Master Diskette - The main diskette you are using during a Backup or Format process. The Master diskette for these processes is usually in Drive 0 .

Menu - A listing of program options, accessed by a single keystroke.
Numeric - Characters that are numbers, decimal points or hyphens.
Operator - The symbols used in the math formulas to denote addition ( + ), subtraction ( - ), multiplication (*) and division (/).

Password Protection - A method of securing your data base so that only security-cleared persons (persons knowing the exact password) can access runtime operations.

Press - Used to describe data entry that only requires a single keystroke.
Protected Field - A field whose data cannot be altered directly by the operator. A protected field is created by using the ! indicator. This type of field is usually changed by the math package.

This would be used in a screen that you want another operator to be able to examine, but not change a record. The same field in another screen without a "protect" designator, but with password protection to the screen, would allow you normal access to that field.

Relationship - Used to describe the directness between data you enter (for a scan or selection) and the data you desire to be a match.

Scan Field - A field used to search through records in a particular order. Scan fields are fields defined in Segment 1 of a file. Scan fields offer numerous ways to cross-reference files for quick access.

Screen - The display shown on your video. When creating screens for a file, you are defining how the data will be arranged on the display.

SCRIPSIT - Radio Shack's word-processing software.
Search - The process of looking for data that meets predetermined criteria.
Segment - A group of fields. Each data base may contain up to four segments. Fields in Segment 1 can be used as scan or selection fields. Segment 1 is predefined to a length of 85 characters. Segments 2 through 4 can be defined from 1 to 256 characters.

Selection Field - A field used like a scan field in report and label printing and building an Index.

Source Diskette - The diskette that information is being copied from.
Type - Used to describe data input that requires several keystrokes.
Update - A method of altering records to reflect changes in a record.


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