

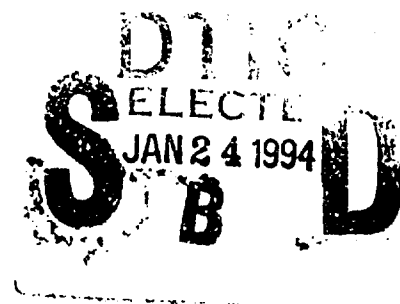
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FINANCIAL RESOURCE REVIEW MODEL

USER'S GUIDE

December 1993



Prepared for:

**Resource Management Directorate
US Army Belvoir RD&E Center
Fort Belvoir, Virginia 22060**

By:

**BRTRC
8260 Willow Oaks Corporate Drive, Suite 800
Fairfax, Virginia 22031**

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INTRODUCTION

Welcome to the Belvoir Financial Resource Review Model (FRRM). This model was developed to provide an efficient means of assembling data for the "Zero Quarter" and quarterly Execution Year reviews and preparation of presentation graphics.

In the Zero Quarter reviews, management is concerned with the spending plans for the upcoming year. In particular, they are looking at the plan for spending money outside the Center (on contracts to industry and transfers to other government agencies), added to the plan for spending money in-house (on salaries and related internal costs). Taken together, these plans should match goals set for spending which have been established by AMC as targets. These goals are heavily front loaded. Since in-house costs tend to be uniform throughout the year, this implies that the external costs should be planned for early in the Fiscal Year.

In the Execution Year reviews, in addition to the spending plan and the goal, there is also the actual spending to date to consider.

The best way to display this data is through graphics. The line representing the goal can be visually compared with the spend plan, and both can be compared to the actual spending to date. This is the principal method for presenting the spending plans in the reviews. Directors display their plans for Center management review, and problem are discussed and resolved. The preparation of these graphics is the objective of the FRRM and they are its main product.

The FRRM was not designed to be a data collection tool. Instead, it integrates the data that is already collected by the Business Planning Model (BPM), the Advanced Procurement Planning System (APPS), and the Accounting (ACCT) databases. As should be expected, this integration is not without its own problems. These three databases do not share the exact same methods for identifying revenue sources, nor the same assumptions in level of detail. In addition, since the data in each are entered in completely separate processes, there is no guarantee that the identifying data are internally consistent or consistent from one database to another. For the most part these problems have been solved through coordination and training; but the user (and the System Administrator) should be attentive to possible inconsistencies.

This model was targeted for experienced business planners. To effectively use the FRRM, and this User's Guide, you should already be familiar with the words and methods used in resource management. You should also have some basic experience in using MS-DOS commands on your computer.

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Basic graphic displays are prepared by the FRRM directly. More sophisticated graphics can be generated by linking the FRRM with Harvard Graphics Version 3.0, which is widely available within Belvoir. You should consult the Harvard Graphics User's Guide if you have questions concerning its use.

The BPM was developed by BRTRC, Inc., 8260 Willow Oaks Corporate Drive, Fairfax, Virginia, 22031, for the U.S. Army Belvoir Research, Development and Engineering Center, Fort Belvoir, Virginia under contract DAAK70-92-D-0003, Task Order 0001. The authors wish to acknowledge the invaluable contributions of Ms. Sue McGraw, Ms. Jaki Hurwitz, and Mr. Morris Zusman for their guidance and assistance in specifying and testing this model.

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1.0 Introduction

This first section of the User's Guide should help you to become quickly acquainted with the FRRM. This includes installation, set up, movement within the program, help prompts, and other information to get you started.

1.1 Set Up

System Requirements

- MS-DOS microcomputer with a minimum of 640 kilobytes (KB) of Random Access Memory (RAM). If you have any other programs loaded in the RAM, such as Local Area Network (LAN) drivers or communications programs, then you should make sure that there is at least 480 KB available in which to run the FRRM. You can find out how much RAM you have available by running the DOS command 'mem'.
- 3 megabytes (MB) of available hard disk space. The FRRM program itself takes up about .5 MB and the rest is for the data files and their indexes. You can find out how much hard disk space you have available by running the DOS command 'dir' or 'chkdsk'.

Installation

- Make a new directory for the FRRM (let's call it FRRM).

```
C:\> mkdir frrm
```

- Make this new directory the current directory.

```
C:\> cd \frrm
```

- Insert the distribution disk into the floppy drive (assume that this is drive A:). Copy the files from the distribution disk onto the hard disk.

```
C:\FRRM> copy A:*.*
```

1.2 Starting the FRRM

- Make sure that you are in the FRRM directory. At the DOS prompt type:

```
C:\> cd \frrm
```

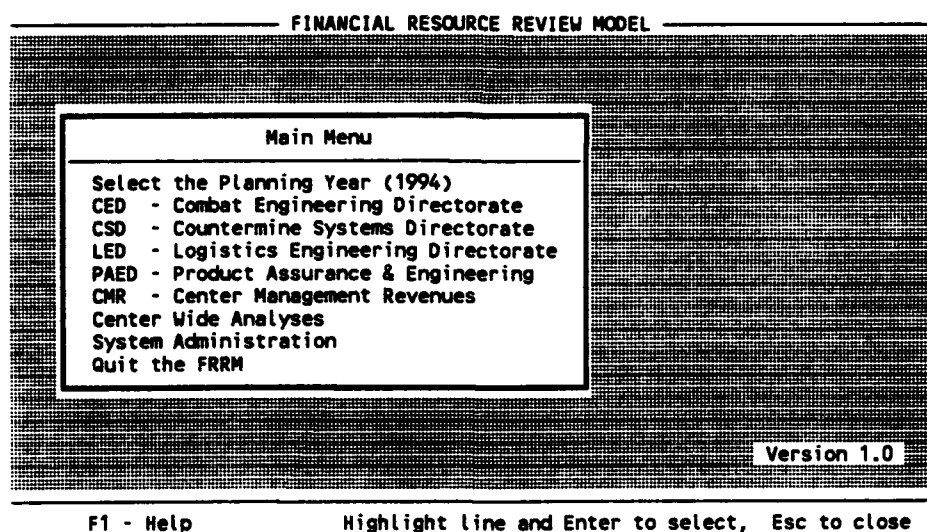
- Then run the program by typing 'FRRM'.

```
C:\FRRM> FRRM
```

- In a few seconds, after the model checks its data files and indexes, you should be at the FRRM's main menu.

1.3 The Main Menu

After starting up the FRRM, the Main Menu is displayed, as shown below:



The principal functions of the FRRM are:

Select Planning Year: Select the Planning Year for the data you want to view. Only one year's data can be viewed at a time. The current planning year is indicated in the menu in parentheses. You may select between the current Execution Year or the first Budget Year.

Organizational Analysis: Select the organization whose data you want to view. The four principal technical directorates with sources of direct and customer funding are represented. In their planning, each directorate would confine their analyses to their own revenues. All other revenues are accessed through the single menu entry 'Center Management Revenues' which are managed by the Resource Management Directorate.

Center Wide Analyses: Allows you to view data from all organizations within the Center.

Systems Administration: This module contains functions for the System Administrator to use to set up, maintain, and control the program.

Quit The FRRM: Exit the FRRM and return to DOS. You should always quit the program before you turn off your computer. If not, some of your index files may get corrupted.

1.4 Backup Procedure

All of the FRRM data files are contained in the C:\FRRM directory. They all have the common .DBF extension. It is sufficient for you to copy your .DBF files to a new subdirectory or to a floppy disk in order to have a backup of your data. To help you do this backup, a backup program has been included with the FRRM. To run this simply type 'brbackup' and then the drive to which you want to copy your files at the DOS prompt in the C:\FRRM directory. You should dedicate a high density floppy disk to this purpose, since the data files can get quite large. For example, if you want to copy your files to the A: drive, you would type:

```
C:\FRRM> brbackup a:
```

You can also send the files to a different subdirectory on your hard disk, to a Local Area Network (LAN) drive, or to a Bernoulli disk simply by specifying the complete path of the backup subdirectory. For example, if you want to send the files to the BACKUP directory on drive H:, you would type:

```
C:\FRRM> brbackup h:\backup
```

Remember to perform a backup frequently, so that a possible equipment failure does not completely wipe out your hard work.

1.5 Common Problems

- **Insufficient Memory:** If the FRRM reports that it is 'Out of Memory', that means that there is not enough RAM available on your computer to perform the current function. You probably have a number of other drivers and programs loaded into RAM from your 'autoexec.bat' and 'config.sys' files. You will need to have at least 480 KB of RAM available (and preferably more) to run the FRRM.
- **Open Error:** If the FRRM reports an 'Open Error', it means that you do not have enough files specified in your 'config.sys' file. FRRM requires that you have at least 'FILES=20' in your 'config.sys' file. More files may be necessary if you have other programs running that render less than 20 files available (such as Windows or menuing programs).
- **Corrupted Index Files:** This problem is difficult to detect. The index files can get corrupted if you accidentally turn off the computer before you exit the FRRM (or in the case of a power failure). The most obvious indication that something is wrong is that data that you know you entered is now missing.

To correct this problem you should return to DOS and delete all the index files (*.nt*). Then rerun the FRRM. This will rebuild all of the index files.

2.0 The Basics

2.1 *Moving Around*

The program is driven entirely from the keyboard, by selecting items from the menus and by entering data into fields. This section describes in general the different types of menus and edit screens you will encounter, and what the function of the keys are in each.

2.2 *Understanding the Screen*

Every screen in the FRRM gives you some indication about where you are and what you are doing. Using the FRRM is easy if you become familiar with the information on the screen and use it to help you move around in the FRRM.

Menu Lines

The top two lines of the screen are reserved for the horizontal menus (if any are activated). The first line will contain the menu items and the second line will contain a brief description of what function the highlighted menu item does.

Status Line

Located at the bottom of the screen is the Status Line. It always reminds you that you can press the F1 key for context sensitive help. In addition, it provides you some suggestions on how to proceed with the current operation.

Version Number

Directly above the status line on the right hand side is the program version number.

2.3 *Vertical Menus*

The Main Menu is an example of a vertical menu. You select an item by positioning the highlight bar over the desired selection and pressing [Enter]. Other examples of vertical menus include pull-down menus and selection lists. They all share the common feature that the selections are arrayed vertically.

To position the highlight bar in a vertical menu:

- Use the **up and down arrow** keys or the **[Tab]** and **[Shift][Tab]** keys to move up or down one line at a time.
- Type the **first letter** of the item you wish to select to move to this item.
- Use the **[Page Up]** and **[Page Down]** keys to skip forward or backward through the menu one screen full at a time. If there is only one screen to the menu, then this will just go to the top or bottom of the menu.
- When the highlight bar is over the item you want to select, press **[Enter]** to activate the item.

Every vertical menu or selection list can be closed by pressing the escape key, **[Esc]**. If a submenu is displayed, then that will return program control to the previous menu. At the Main Menu, **[Esc]** will quit the program.

2.4 Top-Line Menus

The top-line menu is displayed across the top two lines of the screen. The first line lists the commands that can be used within the current module, which are tailored to the specific needs of the module. One of the menu items is highlighted. The second line shows a brief description of what the highlighted command will do if it were selected.

To select one of the top-line menu options you have two alternatives.

- You can use the **arrow keys** (either Up and Down or Left and Right) to highlight the desired command. Then press **[Enter]** to activate the function.
- You can press the **first (capitalized) letter** of the command to activate it directly. You do not need to press **[Enter]** to activate the command in this mode.

2.5 Data Screens

Data screens display the contents of a data file record, or of several records, or of information which has been computed and is just being displayed for your use. On these screens you should be particularly aware of the status line message.

- If the contents of the data screen are of a data file record, then the message will tell you to use the **[Page Down]** key to advance to the next record and the **[Page Up]** key to return to the previous record.
- If the contents are simply computed information and do not represent a specific data file, then the status line message will tell you to press the **[Escape]** key to close the window when you are done with it.

2.6 *Edit Screens*

Most data screens can be activated for data entry by selecting the 'Edit' menu choice from the top-line menu. In the edit mode, the blinking cursor is turned on and the specific fields which can be edited are changed in color to light blue over a black background.

- You enter data into a field by typing it in and then pressing **[Enter]** for the data to be accepted into the field.
- You can skip to the next field without editing the current field by pressing the **down arrow** or the **[Tab]** key. You can skip to the previous field by pressing the **up arrow** or the **[Shift][Tab]** key.
- You can complete the editing by pressing the **[Page Down]** key. This will skip over any remaining fields that can be edited. At the last edit field when you press the **[Enter]** key, you will also complete the editing. Only by completing the editing will the changes you have made be saved.
- You can abort the editing at any time by pressing the **[Escape]** key. If you abort editing, then all the changes you have made on that screen will be thrown out and the screen will be redisplayed with the prior data.

2.7 *Dialog Boxes*

A dialog box appears when FRRM needs more information to perform the command you have just requested, or needs you to make a decision. Generally, a question is asked and two or more options are presented from which you are to choose. For example, the dialog box shown on the next page asks you to decide whether to use straight line estimating of expenses (by selecting 'S/L') or to force expenses to zero (by selecting

'Zero').

Straight Line this In-House Expense or Force to Zero?

S/L Zero

Use the arrow keys or the [Tab] and [Tab][Shift] key to move from option to option and [Enter] to select, or simply type the first letter of the option you want to execute.

A special type of dialog box will also appear to keep you informed about what is happening in the program or to warn you of a problem or an error. These boxes are always in the brown color and only offer you the option of 'Ok'. The message in the box will tell you what the problem is and what you can do about it. An example of this warning will be one that tells you that the function you have just selected is reserved for the System Administrator. Simply press [Enter] to clear this box.

You do not have permission to perform this function

Ok

2.8 *Function Keys*

Four (or five) of the function keys are active in the FRRM. They allow you to perform the following actions:

[F1]: This is the context sensitive Help system which is discussed below

[F2]: This is a list of the text files contained in your FRRM directory. These text files are the output of reports that you have directed to files rather than to the printer. This feature is explained in full in paragraph 3.2 below.

[F3]: This displays an information screen that gives you the Belvoir Customer Support phone number, and the address and phone number of the program developer.

[F4]: This tells you the number of bytes of conventional RAM (Random Access

Memory below 640K) that you have left on your computer. This is for information only. Some program problems are caused by not enough memory available, which happens when much of the computer RAM is taken by various drivers and other programs.

[F5]: Activates the Browse mode for the current file. Only the System Administrator can use this function key.

2.9 *Getting Help*

F1 – Context Sensitive Help

The Help system in the FRRM is context sensitive. This means that Help is available anywhere in the FRRM, and when called upon will be related to the area of the FRRM you are currently using. To get Help, press **[F1]**. A window will open which describes the current feature. You can scroll the screen by using the **up and down arrow** keys and the **[Page Up]** and **[Page Down]** keys. To close this window press the **[Escape]** key.

Help screens are prepared for each vertical menu choice, each pull-down menu choice, and for each data field. Other help screens have been prepared for the occasional question which is asked. The contents of the Help screens can be edited by the System Administrator (see paragraph 6.12).

Customer Support

You should refer all questions concerning the BPM to the Belvoir Resource Management Directorate at (703) 704-2281.

You may also call the program developer, Leslie Harte, BRTRC, at (703) 204-9277 for technical support.

3.0 Common Reporting Features

In each module of the FRRM you are able to print various reports for documentation and analysis. Many of the reporting features are the same throughout the program.

3.1 *Printer Setup*

The FRRM program works with any ASCII printer connected to LPT1. The program does not send any special printer codes. It is your responsibility to set up your printer (top of form, font, character set, etc.) the way you desire. If the printer is not working, the program will warn you about that.

3.2 *Report Destination (Printer vs. Disk)*

You can print every report produced by the FRRM directly to the printer, or you may send it to a disk file. Simply select the destination of your choice at the following prompt:

SEND REPORT TO PRINTER OR FILE?	
Printer	File

If you select 'Printer', the program will immediately try to establish contact with the printer. It may be unsuccessful if the printer is off-line. Simply reset your printer and try again.

You might want to select 'File' if you want to carry this report to another printer or if you want to look at it using the 'View Text Files' option. If you select 'File' you will be prompted for the file name.

Printing to File (.TXT will be added)	
Enter File Name:	██████████

Enter the file name. This file name can be anything up to 8 characters long. The name you choose does not need to relate to the report being printed, but it should be something you can remember. If the file name already exists in the current directory, the program will ask if you want to overwrite it or enter a different filename.

Remember, printing to a file can be very helpful for several reasons:

- ▲ It is quicker than printing to a printer.
- ▲ The report can be pulled into other software packages, like word processors, spreadsheets, and graphics programs.
- ▲ The report file can be previewed within the FRRM by using the 'View Text Files' option.
- ▲ The report can be printed at a later date.

4.0 Select the Planning Year

This is the first choice on the FRRM main menu.

The FRRM works with data from one of two planning years. The first year is called the Execution Year. It is usually the current Fiscal Year -- the year in which you are currently spending money. The second year is called the Budget Year. It is the next year after the Execution Year -- the year which you are preparing for.

You would choose 'Select the Planning Year' from the FRRM main menu to change from one year to the other. The currently selected year is indicated on the main menu as a part of the prompt.

Select Year
1993 - Execution Year
1994 - Budget Year

Simply highlight the year you want to work with and press Enter to select it.

The System Administrator can change the years which are offered through the System Administration utilities menu. This allows the program to be kept current for future use. See paragraph 6.8, found later in this User's Guide.

If you select the Execution Year as the planning year, then the program will attempt to include data from the ACCT database in its computations of the spending plans. This data does not apply to the Budget Year.

The selected planning year also affects the data which is loaded into the database from the BPM, APPS and ACCT databases. The System Administrator should ensure that the correct year is selected to support the current analyses.

5.0 Organizational Analysis

5.1 Introduction

This one section of the User's Guide describes all of the features contained within six of the choices from the Main Menu. These six choices are:

- CED - Combat Engineering Directorate
- CSD - Countermine Systems Directorate
- LED - Logistics Engineering Directorate
- PAED - Product Assurance & Engineering
- CMR - Center Management Revenues
- Center Wide Analyses

They all share the same features within the program. The only difference between them is that they work with different sets of data, as indicated by their names.

5.2 The Revenue Planning Screen

This screen displays the aggregate financial records selected from the BPM. You cannot edit the header data of these records which is shown on the top two lines. The header data for each record originates from the BPM in the import process (see paragraph 6.2) which is performed by the System Administrator. The first line of the header displays the Year and Lab for this record. The second line displays information appropriate to the type of revenue. If the revenue is:

Direct RDTE, it lists the PE, Project and Task.

Direct OMA, it lists the Category, PE and Point Account.

Customer, it lists the customer name (Source) and Group.

DBOF or Other Appropriation does not list any associated information.

You will note that you cannot add or delete records here. Revenues must have been identified in the BPM data in order for them to be included in this model. The System Administrator loads the BPM data into the FRRM for you. You should try to make the BPM and the APPS/ACCT data match as closely as possible to ensure that your data does transfer properly.

A sample of the Revenue Planning Screen is shown on the next page.

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Goto Edit Display Combine List Quit									
Go to a specific Planning Record									
FINANCIAL RESOURCE REVIEW MODEL									
Planning									
Year: 1994		Lab: CED		Proj: D911		Task: 01			
ROTE DIRECT		PE: 35889							
TOTALS (\$K)		EXT	IH	TOT	CUM	GOAL	%	DEV	%
Revenue:	500								
Carry In:	0	OCT	0	4	4	50	10	-46	-92
Carry Out:	0	NOV	0	2	2	6	70	14	-64 -91
		DEC	0	2	2	8	115	23	-107 -93
Net Rev:	500	JAN	0	2	2	10	190	38	-180 -95
		FEB	0	2	2	12	255	51	-243 -95
Externals:	450	MAR	0	2	2	14	325	65	-311 -96
In House:	50	APR	300	2	302	316	365	73	-49 -13
Workyears:	5	MAY	150	2	152	468	395	79	73 18
\$/Wkyr:	10000	JUN	0	2	2	470	430	86	40 9
		JUL	0	2	2	472	445	89	27 6
		AUG	0	2	2	474	460	92	14 3
		SEP	0	26	26	500	480	96	20 4
F1 - Help PgDn - Next PgUp - Prev									

On the left hand side of this screen are displayed the yearly totals for the specific type of revenue identified on the top two lines. First, the amount of the revenue received in this year is shown, followed by the carryover into this year from the previous year (carry in), and then the carryover out of this year into the next year (carry out). The net revenue to be spent this year is computed from these three lines (net revenue = revenue + carry in - carry out).

The total planned externals taken from the APPS data is listed next. Below that the balance remaining for in-house costs is computed (in-house = net revenue - externals). This is followed by the number of in-house workyears planned for this revenue and the \$ per workyear that results.

If the Execution Year is selected as the planning year, then below this on the left is shown the current month of the obligations data obtained from the ACCT database and the total amount obligated through that month. This is not displayed on the sample screen above. You can get a report of these obligations (see paragraph 5.6.5) if you are interested in the specifics of the related ACCT data.

The rest of this screen (to the right) is a table which shows a variety of data in columns where each row is a different month in the planning year. Most of these numbers are computed for you. Only the in-house (IH) spending amounts can be edited (see paragraph 5.4 below).

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The first column (EXT) shows the externals planned for this revenue taken from the APPS data. You can get a report of these externals (see paragraph 5.6.4) if you are interested in the specifics of the related APPS data. The second column (IH) shows the monthly plan for in-house costs. The third column (TOT) totals the external and in-house costs, while the fourth column (CUM) displays the cumulative total planned spending by month -- which is the amount which gets graphed against the goal.

The next two columns (GOAL and %) provide the target against which the spending plan is judged. In reality, AMC establishes percentage goals for spending which depend on the appropriation type. These goal percentages are summarized in the table below:

MONTHLY GOAL PERCENTAGES BY APPROPRIATION TYPE

APPN	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
RDED	10	14	23	38	51	65	73	79	86	89	92	96
OMAD	8	17	25	33	42	50	58	67	75	83	92	100
CUST	7	13	20	27	33	40	47	53	60	67	73	80

- NOTES: (1) RDED goals entered exactly as shown.
(2) OMAD goals are computed to reach 100% in straight line.
(3) Customer goals are computed to reach 80% in straight line.
(4) All other revenue types use OMAD goals.

The monthly percentages are translated into specific monthly spending goals by multiplying the percentage by the total net revenue to be spent.

The last two columns (DEV and %) present the deviation of the spending plan from the goal. The deviation is simply the difference between the goal for each month (GOAL) and the cumulative planned for that month (CUM). The percentage deviation is computed from the ratio of the deviation (DEV) divided by the goal (GOAL) for each month.

5.3 GoTo a Planning Record

This option allows you to bring up a list of available revenue records. You can rapidly go to a specific record by highlighting it and pressing Enter. The window which pops up displays for each record its Lab, appropriation and other identifying data, and finally the amount of the revenue. An example of this screen is shown on the next page.

Select Planning Record							
CED	1	ROED	35889	D911	01	\$	500K
CED	1	ROED	611101	A91A	103	\$	50K
CED	1	ROED	62786	AN20	03	\$	1,993K
CED	1	ROED	63804	DG01	31	\$	700K
CED	1	ROED	63804	DG01	32	\$	2,308K
CED	1	ROED	64270	C426	03	\$	2,069K
CED	1	ROED	64804	DH01	03	\$	960K
CED	1	ROED	64804	DH01	35	\$	2,861K
CED	1	ROED	64804	DH01	36	\$	300K
CED	1	ROED	65502	MM40	14	\$	100K
CED	1	ROED	65502	MM40	213	\$	250K
CED	1	ROED	65810	DE65	3101	\$	500K
CED	1	ROED	65810	DE65	3102	\$	390K
CED	1	ROED	65810	MM40	12	\$	100K
CED	2	OMAD	P20	202092		\$	500K
CED	2	OMAD	P72	721121	30	\$	719K
CED	2	OMAD	P72	728012	13	\$	543K
CED	2	OMAD	P72	728012	17	\$	105K

5.4 Editing the Spend Plan

You are only able to edit a few of the fields on the Revenue Planning Screen. If you select 'Edit' from the top-line menu, the following pull-down menu appears.

Edit Options	
Revenue & carryin to Next FY	
In House Cost Spend Line	

You can either edit the totals data on the left side of the screen, or you can edit the in-house costs displayed in the table.

5.4.1 The Revenue and Carryover

This option lets you edit several items displayed on the left section of the window. You can edit the aggregate amount of revenue for this record, the carryover of funds into this year (Carry In), and the carryover of funds into the next year (Carry Out). Obviously, the balance of (Carry In + Revenue - Carry Out) is the amount of Net Revenue that must be spent in this year.

You can also edit the number of workyears that you anticipate being committed to this revenue. The program computes for you the expected cost per workyear (which is just the ratio of total in-house costs to workyears).

5.4.2 *The In-House Cost Spend Line*

This option lets you edit the in-house cost spend plan (by month). When you select this option, the highlight bar moves to the first month which can be edited. You move the bar to the month you want to edit and then press Enter. You can then type in any specific amount that you expect to spend on in-house costs for that month.

By default, the in-house costs are straight-lined. That is, the total in-house costs are equally spread across the months. You can override any month (or months) by entering the spend plan directly.

If you enter a zero into the in-house cost field for any month, then the program asks you if you really meant for the in-house cost to be zero or if you would rather have the month included in the straight-line estimation.

Straight Line this In-House Expense or Force to Zero?

S/L Zero

The straight-line computation takes the total in-house costs, subtracts any planned expenditures for months in which you have entered data, and then equally apportions the balance among the remaining months.

The introduction of actual obligations in the Execution Year complicates the calculation somewhat. You will notice that in the Execution Year, you cannot edit the data for the months which have already passed. The actual in-house expenditures are computed and subtracted from the total in-house costs, and the balance is straight-lined as described above for the remaining months.

5.5 *Displaying the Spend Plan*

After you have prepared a spend plan, you will want to display it in a graph. This is because it is usually easier to assess the deviation of a spend plan from the target using a graph than the table of numbers that are displayed on the screen. You would select 'Display' from the top-line menu to bring up a list of the display options which are available.

Display Options
Graph This Plan
Create A Slide
Add/Edit a Slide Show
Display Slide Show
Run Harvard Graphics

The top four choices relate to the presentation of graphs using the built in graphics display program which was delivered with the FRRM. This program (dograph.exe) produces acceptable charts for on-line presentation purposes. If you are interested in more advanced charting capabilities, the program will run Harvard Graphics 3.0 for you by selecting the fifth choice on this menu. Each of these options are discussed below.

5.5.1 *Graph this Plan*

This produces a quick graph of the spend plan versus the goal (and including the actual obligations to date if the Execution Year data is being displayed). It uses a built-in graphics display program which is delivered with FRRM. You clear the displayed graphic screen by pressing any key.

There is no built-in ability to print or save this graph. You may use Windows or some other third party software to print this graph or to transfer it to some program which will print it. However, the data for this graph can be saved in a file and retrieved later in a slide show. The next three menu options allow you to define the slides, to edit the slide show, and then to display it.

5.5.2 *Create a Slide*

This option allows you to store the current slide data in a new slide file. It will ask you to name the file. Enter a unique, recognizable name for each slide.

Name of This Slide
Slide:

5.5.3 *Add/Edit a Slide Show*

This option allows you to add slide files to the slide show, and to change the order of the slides.

ADD/EDIT SLIDE SHOW			
1	TRIAL1.GPH	11/30/93	09:47:52
<ADD SLIDE>			

To add a slide file to the slide show, you highlight the <ADD SLIDE> row and select it. This brings up a list of the slide files which are currently defined (shown below). You select a slide file from that list and then the new file is added to the slide show.

Add Slide		
TRIAL1.GPH	11/30/93	09:47:52
TRIAL2.GPH	11/30/93	09:49:21

To rearrange the order of the slide show, you would highlight and select one of the listed files. The sequence number at the beginning of the slide is opened for you to edit. Simply type in the number of the position in the slide show that you want this slide to take. The slide show numbers will be resequenced after each step.

To delete a slide file from the slide show, you would enter a sequence number of zero.

5.5.4 *Display Slide Show*

This option allows you to display the slides in your slide show. They are listed in the order of your slide show. Display the slide by selecting it from the list.

View Slide		
TRIAL1.GPH	11/30/93	09:47:52
TRIAL2.GPH	11/30/93	09:49:21

5.5.5 *Run Harvard Graphics*

This option allows you to run Harvard Graphics with the current slide data instead of using the built-in graphics display program.

The advantages of using Harvard Graphics are that the charts:

- are of higher quality.
- can be edited to your own specifications.
- can be printed.
- can be composed into better slide show formats.

This option has been designed to work with Harvard Graphics 3.0 (HG3). You must have access to HG3 on your computer. Don't forget to have the HG3 directory identified by the System Administrator (see paragraph 6.11).

The current slide data is automatically imported into an HG3 template when it is run. You must remember to save that chart from within HG3 if you want to retrieve it later.

5.6 *Reporting the Spend Plan*

This option allows you to select from among several different reports, which are presented to you in a pull-down menu.

List Options
Print the Graph Data
List these Planning Records
Screen Format
Related APPS Data
Related ACCT Data
Related BPM Data
View Text Files

5.6.1 *Print the Graph Data*

This report simply prints out the data which is displayed on the spending plan charts. In three columns, the report lists the Plan, Goal, and Actual spending amounts by month. The Actual amounts will always be zero unless the Execution Year data is being displayed. The report also includes the two graph title lines and the As Of date.

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CED PLANNED OBLIGATIONS VS DA GOAL			
FY1994 - RDED D911 01 - \$500K			
MON	PLAN	GOAL	ACT
OCT	4	50	0
NOV	6	70	0
DEC	8	115	0
JAN	10	190	0
FEB	12	255	0
MAR	14	325	0
APR	316	365	0
MAY	468	395	0
JUN	470	430	0
JUL	472	445	0
AUG	474	460	0
SEP	500	480	0
As of 12/06/93			

5.6.2 List these Planning Records

This report produces a listing of the totals data for each of the planning records. These are the fields that are displayed on the left side of each screen, along with the header data.

Lab Summary for FY1994 for CED

Source	APPN	PE	Proj	Cat	Task	Rev	Carry In	Carry Out	Net	Ext	Inh	Wkys	\$/Wkyr
DIRECT	RDTE	35889	D911	6.2	01	500	0	0	500	450	50	5	10000
DIRECT	RDTE	611101	A91A	6.1	103	50	0	0	50	0	50	5	10000
DIRECT	RDTE	62786	AH20	6.2	03	1993	0	0	1993	388	1605	6	267500
DIRECT	RDTE	63804	DG01	6.3B	32	2308	0	0	2308	1525	783	0	0
DIRECT	RDTE	64270	C426	6.4	03	2069	0	0	2069	0	2069	0	0
DIRECT	RDTE	64804	DH01	6.4	35	2861	0	0	2861	1820	1041	0	0
DIRECT	RDTE	64804	DH01	6.4	36	300	0	0	300	30	270	0	0
DIRECT	RDTE	65810	DE65	6.5	3102	390	0	0	390	335	55	0	0
DIRECT	OMA	202092		P20		500	0	0	500	0	500	0	0
DIRECT	OMA	721121		P72	30	719	0	0	719	450	269	0	0
DIRECT	OMA	728012		P72	13	543	0	0	543	0	543	0	0
DIRECT	OMA	SM2A00		P72	13	100	0	0	100	0	100	0	0
DIRECT	DBOF					567	0	0	567	130	437	0	0
ATCOM						686	397	100	983	45	938	5	187600
MARINES						170	0	0	170	0	170	0	0
PEO-ASM						525	0	0	525	0	525	0	0
PM-AEC						1000	0	0	1000	399	601	0	0
PM-SURV						200	0	0	200	50	150	0	0
PSEMO						1930	214	0	2144	0	2144	0	0
TACOM						150	0	0	150	30	120	0	0
TOTAL:						21224	711	100	21835	7732	14103	21	475100

5.6.3 Screen Format

The Screen Format report prints a copy of what you see on the screen in the current window. Except for limiting the output to just the contents of the active window, this is essentially the same as the DOS [Print Screen] key.

Year: 1994		Lab: CED		Proj: D911		Task: 01			
RDTE DIRECT		PE: 35889							
TOTALS (\$K)		EXT	IN	TOT	CUM	GOAL	%	DEV	%
Revenue:	500								
Carry In:	0	OCT	0	4	4	50	10	-46	-92
Carry Out:	0	NOV	0	2	6	70	14	-64	-91
		DEC	0	2	8	115	23	-107	-93
Net Rev:	500	JAN	0	2	10	190	38	-180	-95
		FEB	0	2	12	255	51	-243	-95
Externals:	450	MAR	0	2	14	325	65	-311	-96
In House:	50	APR	300	2	302	365	73	-49	-13
Workyears:	5	MAY	150	2	152	468	79	73	18
\$/Wkyr:	10000	JUN	0	2	470	430	86	40	9
		JUL	0	2	472	445	89	27	6
		AUG	0	2	474	460	92	14	3
		SEP	0	26	26	500	96	20	4

5.6.4 Related APPS Data

The APPS data records which are related to the currently visible revenue record can be listed in this report. These are the records which the program associated with this revenue during the load of the APPS data. You can control this process only through careful coordination of the APPS and BPM data. This report is useful to document the externals planned for any revenue group.

Report of APPS Records related to CED RDED D911 01							
PAN	Title	Fund Type		Source	Est Amt	Est Sub	Est Awd
		Type	Action PoP				
4A18020A	MIPR 3D SEISMIC SEARCH SYSTEM	RDED	TNDC	8	150000	03/15/94	04/14/94
4A180300	INCR SYNTHETIC PULSE RADAR SEARCH SYS	RDED	INCR	8	150000	03/15/94	04/20/94
4A180100	MNC ELECTROMAGNETIC BORDER SURV SYS	RDED	NNC	7	150000	08/30/93	05/30/94

5.6.5 *Related ACCT Data*

The ACCT data records which are related to the currently visible revenue record can be listed in this report. These are the records which the program associated with this revenue during the load of the ACCT data. You can control this process only through careful coordination of the ACCT and BPM data. This report is useful to document the actual costs already charged to any revenue group.

Report of ACCT Records related to CED RDED D911 01

Acct No	PMS	FndFY	Lab	Fund	Source	Cat	Proj	Task	Mon	Year	Auth	Oblis

5.6.6 *Related BPM Data*

The BPM data records which are related to the currently visible revenue record can be listed in this report. These are the records which the program associated with this revenue during the load of the BPM data. Depending upon the way in which you specified the BPM data, each revenue record in the FRRM will be derived from one or more BPM revenue records. This report is useful to document the constituent revenue elements in any revenue group. The columns labeled 'Over' are the carryover amounts out of the year for that column and into the next year.

Report of BPM Records related to CED RDED D911 01

Lab	Fcn	Source	APPN	PE	Proj	Cat	Task	1993 Rev	1994 Rev	1992 Over	1993 Over	1994 Over
CED	TUNDET	DIRECT	RDTE	35889	D911	6.2	01	500	500	700	0	0

5.6.7 *View Text Files*

The first thing displayed is a list of the text files contained in your FRRM directory. Each is shown with its size, date, and time. These are the files you have created so that you can preview the reports and incorporate them into other documents. Highlight and select the file you want to work with and press [Enter] to select it.

View/Print/Delete Text File			
CENTER.TXT	6462	06/28/93	16:23
INOH.TXT	582	06/28/93	16:23
INTERN.TXT	3423	06/28/93	16:23
NETS.TXT	3854	06/28/93	16:23
TEST.TXT	2372	06/28/93	15:31

For each file you can View, Print, or Delete it. The next message asks you to make your choice:

File CENTER.TXT is selected
View Print Delete

View: This opens a full screen window in which to view the text file. Use the **up** and **down** arrow keys and the [Page Up] and [Page Down] keys to move around in the file. Use the **left** and **right** arrow keys to see columns which are not visible. Press the [Esc] key to close the view window when you are done.

Print: This sends the text file to the printer just like it had been sent directly from the report in the first place. As you will note while viewing, the text file also contains the control codes for the page ejects.

Delete: Deletes the text file and removes it from the list. This will not affect the data in the database. It will only remove the text file. You may need to do this to free up space on your hard drive.

You can also get to 'View Text Files' by pressing the [F2] key anywhere within the program.

5.7 The Combination Planning Screen

The 'Combine' menu option lets you look at arbitrary combinations of revenue records to see what the spend plan for the combination looks like in aggregate. You will only be allowed to look at, not edit, the spend plan at the combination level.

Your first decision is to select a predefined combination record to display, or to create a new one. In the example pull-down menu shown below, three combinations have already been defined for CED. In a new installation, all the combinations would have to be added and defined by the user.

Select Combination Record
CED OMA
CED ROTE
CED ALL
Add New Combination

Simply highlight one of the combinations and press Enter to have the combination displayed. A sample of the combination screen is shown below. It looks almost identical to the individual revenue screen except that it has only the combination name on the title line and not the individual revenue descriptors. It can also be identified by the word 'Combined' on the top line of the window. There are also a few changes on the top-line menu which you will note.

Title	Select	Display	Delete	List	Quit	Combined			
Year: 1994 Lab: CED									
Title: CED ALL									
TOTALS (\$K)		EXT	IH	TOT	CUM	GOAL	%	DEV	%
Revenue: 19184									
Carry In: 711	OCT	1432	1080	2512	2512	1727	9	786	46
Carry Out: 100	NOV	3065	1080	4145	6658	2686	14	3972	148
	DEC	495	1080	1575	8233	4412	23	3820	87
Net Rev: 19795	JAN	100	1080	1180	9413	6714	35	2699	40
	FEB	550	1080	1630	11043	8825	46	2219	25
Externals: 6832	MAR	0	1080	1080	12124	11127	58	997	9
In House: 12963	APR	0	1080	1080	13204	12661	66	542	4
Workyears: 16	MAY	1100	1080	2180	15384	14004	73	1380	10
\$/Wkyr: 810188	JUN	0	1080	1080	16464	15347	80	1117	7
	JUL	90	1080	1170	17635	16115	84	1520	9
	AUG	0	1080	1080	18715	17074	89	1641	10
	SEP	0	1080	1080	19795	18033	94	1762	10

F1 - Help

Esc to close window

These new top-line menu options are as follows:

5.7.1 Title

The title is the name you give to this combination of revenues. It is displayed on the second line of the window. The title will be used on the charts and reports to distinguish this combination from all others. You normally enter the title when you add a new combination. However, if you want to change the title at a later date, then you select the 'Title' option on the top-line menu to edit it.

5.7.2 Select

The Select screen lets you identify (toggle) which individual revenues are members of this combination. Normally, you make this selection when you add a new combination. However, you may wish to review or change this selection at a later time. Simply choose the 'Select' option from the top-line menu to bring up a window as shown below.

Toggle Elements of this Combination									
	CED	1	RDED	35889	D911	01	\$	500K	
X	CED	1	RDED	611101	A91A	103	\$	50K	
X	CED	1	RDED	62786	AH20	03	\$	1,993K	
X	CED	1	RDED	63804	DG01	31	\$	700K	
X	CED	1	RDED	63804	DG01	32	\$	2,308K	
X	CED	1	RDED	64270	C426	03	\$	2,069K	
X	CED	1	RDED	64804	DH01	03	\$	960K	
X	CED	1	RDED	64804	DH01	35	\$	2,861K	
X	CED	1	RDED	64804	DH01	36	\$	300K	
X	CED	1	RDED	65502	MM40	14	\$	100K	
X	CED	1	RDED	65502	MM40	213	\$	250K	
X	CED	1	RDED	65810	DE65	3101	\$	500K	
X	CED	1	RDED	65810	DE65	3102	\$	390K	
X	CED	1	RDED	65810	MM40	12	\$	100K	
X	CED	2	OMAD	P20	202092		\$	500K	
	CED	2	OMAD	P72	721121	30	\$	719K	
	CED	2	OMAD	P72	728012	13	\$	543K	
	CED	2	OMAD	P72	728012	17	\$	105K	

This is the same screen that was displayed when you added a new combination. Simply highlight the line you want to select/deselect and press Enter. The 'X' to the left of each line indicates whether the revenue is included in the combination (an 'X') or not included (no 'X'). Press Esc to close this window and the combination will be recalculated with the newly defined revenue elements.

5.7.3 *Display*

This is the same Display menu as was discussed in paragraph 5.5 above. The same options are offered except that the charts displayed will be relative to the current combination record.

5.7.4 *Delete*

This option will delete the current combination record.

5.7.5 *List*

This is the same List menu as was discussed in paragraph 5.6 above. The same options are offered except that the reports printed will be relative to the current combination record. Note that the report of related ACCT records is not functional at the combination level.

6.0 SYSTEM ADMINISTRATION

6.1 Introduction

The System Administration utilities are password protected. Only the System Administrator is allowed to use these because of their impact on the operation of the model, and because of the coordination required among the various users of the FRRM. To access the FRRM as the System Administrator:

- From the C:\FRRM directory prompt type **FRRM SYSADMIN**.

C:\FRRM> FRRM SYSADMIN

- You will now be prompted for a password. Enter the previously defined password. For the FRRM, the System Administrator's password is 'review'.
- In a few seconds, after the model checks its data files and indexes, you should be at the FRRM's main menu, with System Administrator privileges.

The System Administration utilities are selected from a submenu, shown below:

System Administration
Load from BPM Revenue Data
Prepare the APPS Data
Prepare the ACCT Data
Load from APPS/ACCT Data
List Unused APPS Records
List Unused ACCT Records
Change the Execution Year
Reindex the Data Files
Pack the Data Files
Location of Harvard Graphics
Done

As you can see from the menu choices, the System Administrator is responsible for making sure the BPM, APPS, and ACCT data are loaded into the FRRM and properly integrated. This is a critical task for the success of the program. User's should not attempt to use the FRRM to create spend plans until the System Administrator has completed the loading of the data. However, the task of making the data contained by

the BPM, APPS, and ACCT databases consistent so that it can be properly loaded into the FRRM is the responsibility of the line directorates.

The System Administrator also has a number of other capabilities not available to the normal user which are described at the end of this section.

6.2 Load from the BPM Revenue Data

As discussed above, the BPM revenue data is the source of revenue data for the FRRM. The System Administrator periodically loads the BPM revenue data into the file 'obchart1.dbf' using this menu option. In principal, this should occur before each quarterly review, using the most current BPM data. However, there is no need to reload the BPM data if it has not changed since the last load.

The program first provides you the opportunity to browse through (and edit if desired) the BPM revenue data file ('revenue.dbf'). You should copy the file 'revenue.dbf' into the FRRM directory before running the program so that it will be available for use. This will also ensure that if you do decide to edit the file, the actual BPM data will not be inadvertently corrupted.

Edit the BPM Revenue data file? No Yes

This brings up a standard browse window on the revenue.dbf file. See paragraph 6.13 for a discussion of this feature.

Then the program prompts you to continue with the loading of the data for the current year. Only one year's worth of revenue data will be loaded at a time. You will have to run this procedure twice to load both year's data.

Load BPM data for 1994? No Yes

The loading process consists of several steps which process the revenue data differently for the hardware directorates versus the support directorates, and by appropriation type.

In general, the revenue data is processed so that several common records in the BPM data are represented as one record in the FRRM data. Note that the BPM concept of Field of Endeavor (FOE) or Function is not present in the FRRM.

The first pass is for the hardware directorates (CED, CSD, LED, and PAED). BPM revenue records are totalled as follows:

- (1) RDTE direct revenues are totalled on lab+project+task.
- (2) OMA direct revenues are totalled on lab+pe+category+task.
- (3) DBOF, PROC, and OTHER direct revenues are totalled on lab+appn. In addition, the contents of the category, prog_elem,proj_no, and task fields are replaced with ' '.
- (4) All remaining revenues are Customer funded. They are totalled on lab+source. In addition, the contents of the category, prog_elem, proj_no, task, and appn fields are replaced with ' '.

The second pass is for the rest of the Center directorates. BPM revenue records are totalled as follows:

- (1) RDTE direct revenues are totalled on project+task.
- (2) OMA direct revenues are totalled on pe+category+task.
- (3) DBOF, PROC, and OTHER direct revenues are totalled on appn. In addition, the contents of the category, prog_elem,proj_no, and task fields are replaced with ' '.
- (4) All remaining revenues are Customer funded. They are totalled on source. In addition, the contents of the category, prog_elem, proj_no, task, and appn fields are replaced with ' '.
- (5) All of these records are identified with the lab field 'CMR'.

These total records are placed into obchart1.dbf without overwriting any existing obchart1 spend plans. New records are appended only when needed. Existing obchart1 records which are no longer current with respect to the BPM are removed.

In addition to these records obtained from the BPM, there are four special management records needed for specific programs to link with the APPS and ACCT databases. If they aren't already in the obchart1 file, then they must be created. These are:

- | | | |
|-----|---|---|
| (1) | lab = 'CMR'
proj_no = 'AH20'
group = 'DIRECT'
source = 'DIRECT'
appn = 'RDTE' | category = '6.2'
prog_elem = '62876'
proj_no = 'AH20'
task with '00' |
|-----|---|---|

- | | | |
|-----|--|---|
| (2) | lab = 'CMR'
appn = 'RDTE' | source = 'MISSION'
group = 'DIRECT' |
| (3) | lab = 'PAED'
proj_no = 'AH20'
group = 'DIRECT' | source = 'R&D DIRECT'
task = '00' |
| (4) | lab = 'PAED'
proj_no = 'MM51'
group = 'DIRECT' | source = 'G&A ACCOUNT'
proj_no = 'MM51'
task = '00' |

Finally, check all the obchart1 records and replace the source field with 'ATCOM' each time it is called 'TROSCOM'. This correction may be removed in the future as the use of 'TROSCOM' disappears.

6.3 Prepare the APPS Data

The APPS data is transferred to the FRRM through an ASCII file (pmsapps.dat) which is prepared by the Information Management Directorate. The first step is to load this data into a dBase file and then to perform a number of known quality control checks on it. The following prompt initiates the preparation process:

Prepare the APPS data file?

No Yes

The checks that are performed make the data more internally consistent and more amenable to comparison with the BPM and ACCT data. These are:

- (1) Replace all fundtype with 'RDED' for fundtype='G&A'.
- (2) Replace all category with ocat, task with substr(ams,8,2) for fundtype='OMA'.
- (3) Replace all lab with alab.
- (4) Replace all lab with 'CMR' for lab < > 'CED' .and. lab < > 'CSD' .and. lab < > 'LED' .and. lab < > 'PAED'.
- (5) Replace all lab with 'CMR' for proj_no='MM51'.
- (6) Replace all source with cust for empty(source).
- (7) Replace all source with 'PM-PAT' for source='PM PAT'.
- (8) Replace all source with 'PM-PWL' for source='PM PWL'.

- (9) Replace all source with 'ATCOM' for source='TROSCOM'.
- (10) Replace all source with 'DARPA' for fundtype='DARPA'.
- (11) Delete for empty(fundtype).

Finally, the administrator is offered the chance to edit the APPS data file before it is loaded into the FRRM.

Edit the APPS data file?

No Yes

If 'Yes' is selected, this opens a browse window into the APPS data file (pmsapps.dbf). The administrator can edit the data in any field, and can add new records to the database. See paragraph 6.13 for a discussion of the browse feature. The actual loading of the APPS data is performed in the step described in paragraph 6.5 below.

6.4 *Prepare the ACCT Data*

The ACCT data is also transferred to the FRRM through an ASCII file (pmsacct.dat) which is prepared by the Information Management Directorate. Just as with the APPS data, the first step is to load this data into a dBase file and then to perform a number of known quality control checks on it. The following prompt initiates the preparation process:

Prepare the ACCT data file?

No Yes

The checks that are performed make the data more internally consistent and more amenable to comparison with the BPM and APPS data. The checks that have been defined to date are:

- (1) replace all category with ocat, task with substr(ams,7,2) for fundtype='OMA'.
- (2) replace all lab with alab.
- (3) replace all lab with 'CMR' for lab < > 'CED' .and. lab < > 'CSD'

- .and. lab < > 'LED' .and. lab < > 'PAED'.
- (4) replace all lab with 'CMR' for proj_no='MM51'.
- (5) replace all lab with 'CMR' for proj_no='AH20' .and.
(substr(acct_no,6,2)+'!') \$
'GA!GB!GC!GD!GE!GF!GG!GH!GI!GJ!GK!').
- (6) replace all lab with 'CMR' for fundtype='RDER' .and.
source='MISSION'.
- (7) replace all source with 'DARPA' for fundtype='DARPA'.
- (8) delete for empty(fundtype).

Finally, the administrator is offered the chance to edit the ACCT data file before it is loaded into the FRRM.

Edit the ACCT data file?

No Yes

If 'Yes' is selected, this opens a browse window into the ACCT data file (pmsacct.dbf). The administrator can edit the data in any field, and can add new records to the database. See paragraph 6.13 for a discussion of the browse feature. The actual loading of the ACCT data is performed in the step described in paragraph 6.5 below.

6.5 *Load from the APPS/ACCT Data*

This function is used to load the prepared APPS and ACCT data into the FRRM. The APPS data is the plan for obligating externals. The ACCT is the current status of all obligations. Only data for the current year will be loaded. If the current year is not the base year, then ACCT data will not be loaded.

Note that this function will not work unless the APPS and ACCT data have already been transferred from the native ASCII format into the DBF format (described in paragraphs 6.3 and 6.4 above). The loading of APPS/ACCT data is initiated by answering 'Yes' to the following prompt.

Load APPS/ACCT data for 1994?

No Yes

The loading of the APPS and ACCT data depend upon the contents of the prog_elem (PE) and task fields in the obchart1 file (which was loaded from the BPM data). The contents of these two fields will determine what level of aggregation the data is represented at.

Four passes through the APPS and ACCT data are necessary to handle every combination of the prog_elem and task field so as to match up correctly with the BPM data. These are:

- (1) The first pass is for when both fields have been defined (i.e., the revenues have been defined precisely down to the task level).
- (2) The second pass is for when only the program element has been defined (i.e., the revenues have been more generally defined and are not specified at the task level).
- (3) The third pass is for when only the task has been defined (i.e., the task is defined but not the PE, which occurs occasionally in OMA records).
- (4) The fourth pass is for when neither field has been defined. All Customer funding, as well as DBOF, PROC, and OTHER appropriations, are of this type.

In each pass, APPS/ACCT data are extracted into obchart1 one record at a time. As the program extracts APPS/ACCT data, it marks the APPS/ACCT file record as being 'Used' so that it won't be counted again, and it fills in a pointer to the obchart1 record to identify which record it was linked to.

6.6 List Unused APPS Records

This report lists the APPS records which were not used in the load process described in paragraph 6.5 above. These records are identified because the field USED is not marked with an 'X'. The System Administrator will want to look at these records to determine what could have caused them to be unused during the load process. If necessary, the underlying APPS or BPM data will need to be corrected (either through modifications to the databases themselves or by editing their transfer files as described in paragraphs 6.2 through 6.4 above) and the load process reinitiated.

6.7 List Unused ACCT Records

This report lists the ACCT records which were not used in the load process described

in paragraph 6.5 above. These records are identified because the field USED is not marked with an 'X'. The System Administrator will want to look at these records to determine what could have caused them to be unused during the load process. If necessary, the underlying ACCT or BPM data will need to be corrected (either through modifications to the databases themselves or by editing their transfer files as described in paragraphs 6.2 through 6.4 above) and the load process reinitiated.

6.8 *Change the Execution Year*

This utility allows the System Administrator to edit the Execution Year. It will be needed once a year to update the Execution and Budget years the program uses.

Change the Execution Year	
Execution Year:	1993

Simply type in the new year. The Budget Year will be the year following. The currently entered Execution Year is saved in the file 'frmm.cfg'.

6.9 *Reindex the Data Files*

This utility recreates the index files for the FRRM system. Occasionally, the index files can get confused or corrupted. When this happens, the most common symptom is that data records that you know are there are no longer visible. The most common reason that they became corrupted is that the computer was turned off without exiting the program, or because of a power failure. Simply answer 'Yes' to the following question to have the index files rebuilt.

Reindex the FRRM data files?	
No	Yes

Index files are also automatically rebuilt at the beginning of the program when the data files are scanned. If the index file is missing, or has a date/time older than the data file, then it is automatically rebuilt. You can force the FRRM to rebuild the index files by deleting them. To do this type 'delete *.nt*' at the C:\FRRM> prompt.

6.10 Pack the Data Files

When records are deleted from the database (which usually only happens with the combinations file 'obchart2.dbf'), the records are not physically removed. This has no negative impact on the program other than the data file might be a few bytes larger than it needs to be. Answer 'Yes' to the following prompt to have the deleted records permanently removed from the data files.

Remove the Deleted Records? No Yes

6.11 Location of Harvard Graphics

As discussed in paragraph 5.5.5 above, the program can run Harvard Graphics 3.0 (HG3). When it does so, HG3 starts up with the current slide data loaded into a template. This menu selection lets you tell the program where to find the HG3 program and its data files.

LOCATION OF HARVARD GRAPHICS Location of Harvard Graphic EXE: D:\HG3\ Location of Harvard Graphic Data Files: D:\HG3\DATA\

The first directory is the location of the 'hg3.exe' program file. You should make sure that this HG3 program file is readily available. The FRRM program will not attempt to log you into your network for you. If you specify a network drive for HG3, then it must be available to you before you run the FRRM.

The second directory is the location of the HG3 data files. This is where the chart template is stored and where the program writes the data for the current slide which is transferred into the template. This directory also needs to correspond to the settings made in HG3.

6.12 Editing the Help Text

As you have seen, help screens are available at most places in the program. They can be reached by pressing the [F1] key. However, the text displayed in the help screens may be inadequate, or may be missing altogether.

The System Administrator can edit the help text (where a normal user cannot). When the help screen is displayed, the System Administrator has a flashing cursor. He can edit the text using the built-in narrative editor. It is a full screen editor, but you will be confined to the size of the current help window (which is somewhat limiting when there is no current help text).

When you are done editing the text, simply press the [Ctrl] and [W] keys simultaneously to save the revised text to the help file.

6.13 Browsing Data Files

The System Administrator can 'browse' the currently active data file at any time by pressing the [F5] key. This key is not active for the normal user. The browse mode arrays the fields and records of the data file into columns and rows, respectively (shown below).

				OBCHART1				
FOR_YEAR	LAB	GROUP	SOURCE	APPN	CATEGORY	PROG_ELEM	PROJ_NO	TASK
1994	CED	DIRECT	DIRECT	RDTE	6.2	35889	D911	01
1994	CED	DIRECT	DIRECT	RDTE	6.1	611101	A91A	103
1994	CED	DIRECT	DIRECT	RDTE	6.2	62786	AK20	03
1994	CED	DIRECT	DIRECT	RDTE	6.3B	63804	DG01	31
1994	CED	DIRECT	DIRECT	RDTE	6.3B	63804	DG01	32
1994	CED	DIRECT	DIRECT	RDTE	6.4	64270	C426	03
1994	CED	DIRECT	DIRECT	RDTE	6.4	64804	DH01	03
1994	CED	DIRECT	DIRECT	RDTE	6.4	64804	DH01	35
1994	CED	DIRECT	DIRECT	RDTE	6.4	64804	DH01	36
1994	CED	DIRECT	DIRECT	RDTE	6.5	65502	MM40	14
1994	CED	DIRECT	DIRECT	RDTE	6.5	65502	MM40	213
1994	CED	DIRECT	DIRECT	RDTE	6.5	65810	DE65	3101
1994	CED	DIRECT	DIRECT	RDTE	6.5	65810	DE65	3102
1994	CED	DIRECT	DIRECT	RDTE	6.5	65810	MM40	12
1994	CED	DIRECT	DIRECT	OMA	P20	202092		
1994	CED	DIRECT	DIRECT	OMA	P72	721121		30
1994	CED	DIRECT	DIRECT	OMA	P72	728012		13

The active file name is written on the top center of the window border. You can move around in the file to locate the data you want using the arrow keys. This is particularly useful if you are looking for some particular piece of data.

BE CAREFUL! You can also edit the data in the browse mode. Simply start typing new information into any field and it will be entered. If you make a mistake, you can press **Esc** to abort the edit of any particular cell. Once you have accepted the cell, by pressing **Enter** or by pressing the **up** or **down** arrows keys, the change is made in the data file and the old contents of the cell are lost. Also, there are no controls on the values that can be entered into the fields in the browse mode.