



US Department
of Transportation
Federal Transit
Administration

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**THE RAIL TRANSIT
ENERGY MANAGEMENT PROGRAM**

ENERGY DATABASE

VOLUME II

MARCH 1995

Prepared by:

Richard A. Uher

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P.O. Box 2950
Pittsburgh, Pennsylvania 15230-2950**

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FTA TECHNICAL ASSISTANCE PROGRAM

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16. Abstract <p>The Rail Transportation Energy Management Program (EMP) is a private/public partnership whose objective is to reduce rail transit energy cost and improve energy efficiency. Primary funding for the program comes from the Federal Transit Administration and is supplemented by the private sector (electric utility and rail transit supply industries). The EMP is housed at and operated by the Rail Systems Center at Carnegie Mellon Research Institute, a division of Carnegie Mellon University.</p> <p>The Energy Database (EDB) was set up under the program. The purpose of the EDB is to provide information to the members of the program. This information includes rail transit energy and energy cost data and the results of implementation of energy cost reduction strategies. The EDB also includes a means for timely exchange of information among transit authorities as well as methods for monitoring the overall cost reduction and efficiency improvement associated with energy management.</p> <p>The database is presently set up on a personal computer and is accessed by the users via an 800 telephone line.</p> <p>The EDB became operational during October, 1994.</p>					
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METRIC CONVERSION FACTORS

Approximate Conversions to Metric Measures				Approximate Conversions from Metric Measures			
Symbol	When You Know	Multiply by	To Find	Symbol	When You Know	Multiply by	To Find
LENGTH							
in	inches	2.5	centimeters	cm	centimeters	0.4	inches
ft	feet	30	centimeters	cm	centimeters	0.4	inches
yd	yards	0.9	meters	m	meters	1.1	yards
mi	miles	1.6	kilometers	km	kilometers	0.6	miles
AREA							
sq in	square inches	6.5	square centimeters	sq cm	square centimeters	0.16	square inches
sq ft	square feet	0.09	square meters	sq m	square meters	1.2	square feet
sq yd	square yards	0.8	square meters	sq m	square meters	0.8	square yards
acres	acres	2.5	hectares	ha	hectares (10,000 m ²)	2.5	acres
MASS (weight)							
oz	ounces	28	grams	g	grams	0.035	ounces
lb	pounds (16 oz)	0.45	kilograms	kg	kilograms (1000 g)	2.2	pounds
	short tons (2000 lb)	0.9	tonnes (1000 kg)	t	tonnes (1000 kg)	1.1	short tons
VOLUME							
qt	quarts	0.95	liters	l	liters	1.05	quarts
pt	pints	0.47	liters	l	liters	1.05	pints
gal	gallons	3.8	liters	l	liters	0.26	gallons
cu ft	cubic feet	0.03	cubic meters	m ³	cubic meters	26	cubic feet
cu yd	cubic yards	0.76	cubic meters	m ³	cubic meters	1.3	cubic yards
TEMPERATURE (exact)							
°C	Celsius temperature	9/5 (also subtract 32)	Fahrenheit temperature	°F	Fahrenheit temperature	5/9 (also add 32)	Celsius temperature

* 1 in = 2.54 exactly. For other exact conversions and more detailed units, see NBS Misc. Publ. 224, Unit of Weight and Measure, Price \$2.75. SD Catalog No. C13.10.200.



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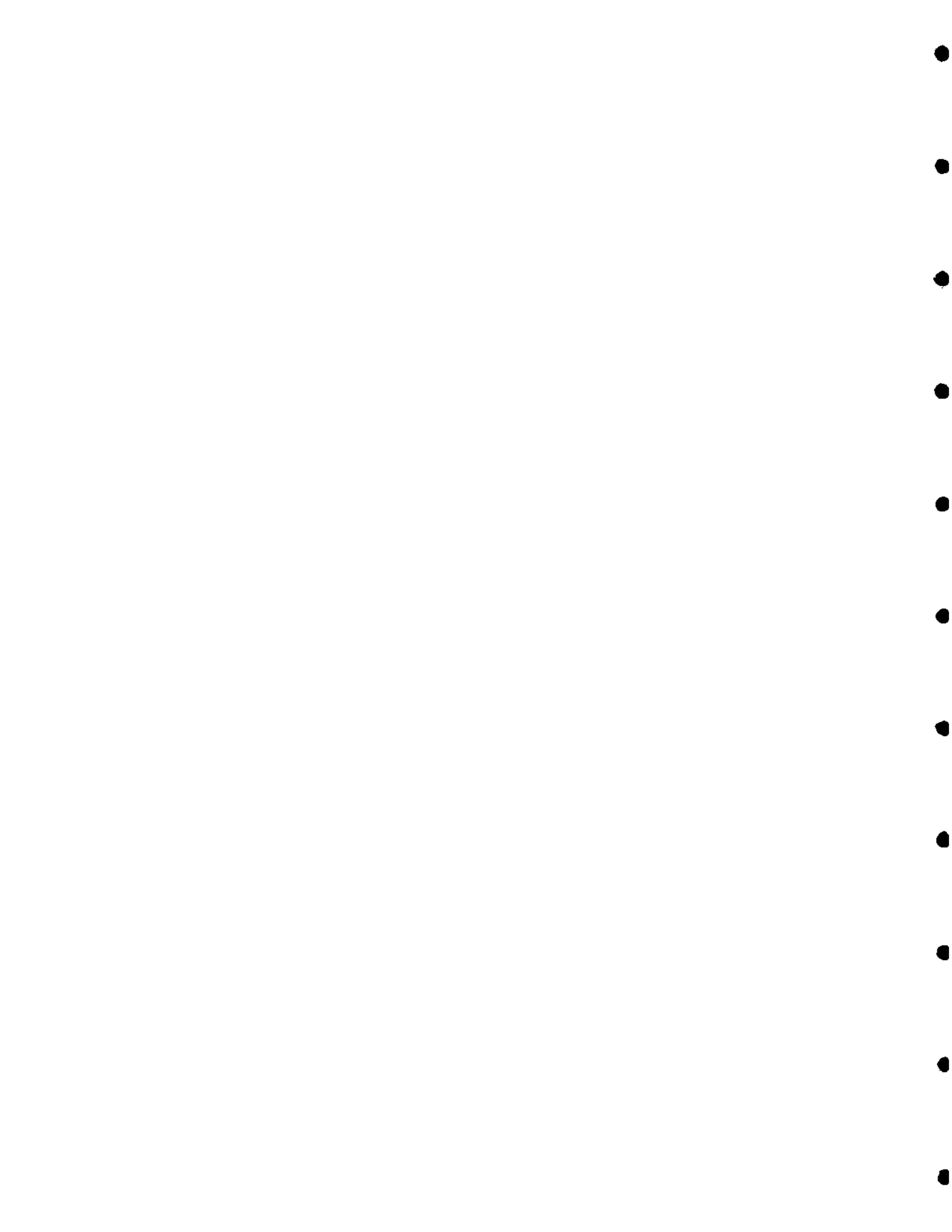


TABLE OF CONTENTS

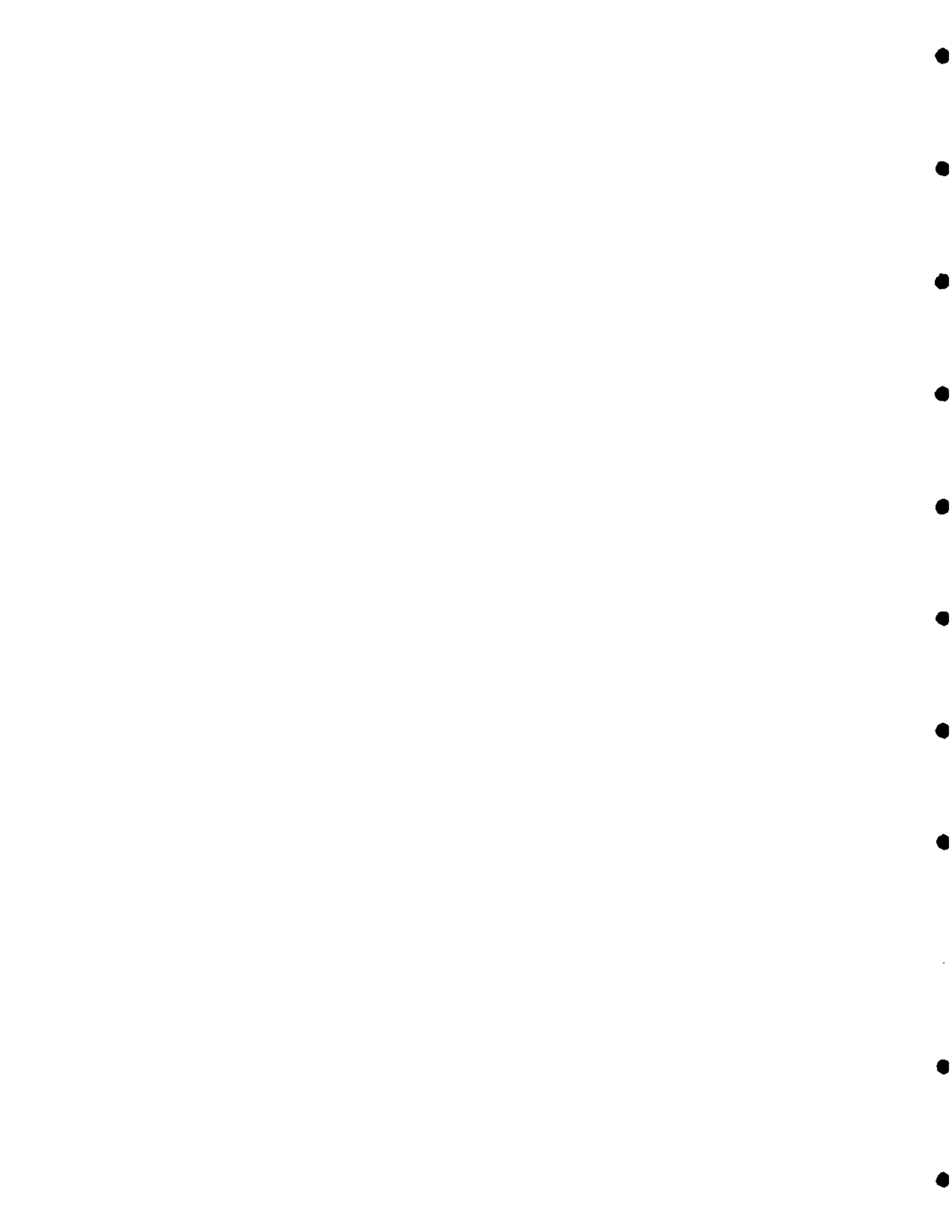
EXECUTIVE SUMMARY	1
1.0 INTRODUCTION	3
2.0 DESCRIPTION OF DATABASE STRUCTURE AND CONTENTS	5
2.1 Hardware	5
2.2 Software	5
2.3 Contents	5
3.0 TRANSIT AUTHORITY ENERGY INFORMATION	13
3.1 Introduction	13
3.2 Information on Energy Data Structure	13
3.3 Transit Energy Data Structure by Specific Transit Authority .	19
4.0 ENERGY REPORT INDEX	23
5.0 THE RAIL TRANSIT ENERGY PROGRAM DATABASE (USER'S MANUAL)	26
5.1 A Quick Overview	26
5.2 Modules and Menuing	29
5.2.1 The Main Menuing System	29
5.2.1.1 Global Commands (30)	
5.2.1.2 Concatenated Commands (30)	
5.2.1.3 File Transfers (31)	
5.2.2 Modules	32
5.2.2.1 The Messaging System (32)	
5.2.2.2 Electronic Mail (34)	
5.2.2.3 Forums (42)	
5.2.2.4 Library of Files (50)	
5.2.2.5 Polls and Questionnaires (58)	
5.2.2.6 Registry of Users (59)	
5.2.2.7 User Account Display/Edit (59)	
5.2.2.8 Search and Retrieve (63)	
6.0 PRESENT STATUS AND EXPANSION PLANS	65
6.1 New Transit Authority Information	65
6.2 Transit Authority Information Updating	65
6.3 E-Mail and Forum Activity	65
6.4 Other Categories	65
6.5 Additional Capabilities	66

LIST OF TABLES

TABLE 2.1 PRINCIPAL MENU OF EMP DATABASE	7
TABLE 2.2 MENU OF INFO PAGE	8
TABLE 2.3 MENU OF EDBASE	9
TABLE 2.4 REMOTE OPERATOR MENU	12
TABLE 3.1 MENU OF TED PAGE	14
TABLE 3.2 MENU OF TEDAM PAGE	15
TABLE 3.3 MENU OF TEDNZ PAGE	16
TABLE 3.4 TRANSIT AUTHORITY LISTING ALPHABETIZED BY TRANSIT AUTHORITY NAME	17
TABLE 3.5 MENU OF INFOAZL (INFONZL) PAGE	18
TABLE 4.1 MENU OF RINDEX PAGE (SEARCH & RETRIEVE)	25

LIST OF FIGURES

FIGURE 3.1 THE WMATA TREE IN THE EDB 22



EXECUTIVE SUMMARY

The Rail Transportation Energy Management Program (EMP) is a private/public partnership whose objective is to reduce rail transit energy cost and improve energy efficiency. The rail transit authorities are partners, the electric utilities who serve the authorities are associate members and rail transit suppliers are affiliate members. Primary funding for the program comes from the Federal Transit Administration (FTA). The EMP is housed at and operated by the Rail Systems Center of Carnegie Mellon Research Institute, a division of Carnegie Mellon University.

The Energy Database (EDB) was set up under the program. The purpose of the EDB is to provide information to the members of the program. This information includes rail transit energy and energy cost data and the results of implementation of energy cost reduction strategies. The EDB also includes a means for timely exchange of information among transit authorities as well as methods for monitoring the overall cost reduction and efficiency improvement associated with energy management.

The database is presently set up on a personal computer and is accessed by the users via an 800 phone line. The software chosen to operate the EDB is the Major Bulletin Board System (BBS) by GALACTICOMM, Version 6.12. This software is registered to the RSC. The EDB is fully transferrable to other PCs as it grows and requires more storage and memory.

The principal menu of the EDB contains the following entries:

- I - Information Center
- N - Energy News
- D - Energy Database
- E - Electronic Mail
- F - Forums
- A - Account Display/Edit
- R - Registry of Users
- S - Systems Manager
- X - Exit System (Logoff)

I - Information Center

The information center contains instructions necessary for a user to access the EDB. This includes information about the RSC and the EMP, shortcut commands to navigate quickly through the database and a "help" document, which is essentially the Users' Manual.

N - Energy News

This section contains news items which are presented by the system operator; namely, the RSC. The file contains a history of such items by date of posting.

D - Energy Database

The information contained here is the core of the EDB. The members and contact persons of the EMP are listed and this is updated as membership changes. The energy cost data, as well as energy management activities, are also reported here for all rail transit authorities. The level of detail is reflective of the level of participation by them. Finally, an index of energy related reports located at the RSC can also be accessed from this area.

E - Electronic Mail

A full E-mail service is provided so that individual members of the EMP can communicate with each other.

F - Forums

A forum service is provided on the system. Several topics concerning energy related matters have been identified and are open to comments and discussion by members.

A - Account Display/Edit

Under this section a user can display his account data, including usage, as well as change general information on address, phone number, password, etc.

R - Registry of Users

This area contains information on all users of the system. The data contained here is visible to all other users.

S - Systems Manager

This section is only accessible by the system operator and is concerned with day-to-day system management activities.

X - Exit System (Logoff)

This area provides the means to logoff the EDB.

The EDB became operational during October, 1994, and is expected to increase in activities as users come on line.

1.0 INTRODUCTION

As part of the Rail Transit Energy Management Program (EMP), a database has been established at the Rail Systems Center (RSC) at Carnegie Mellon University.

The database is part of a bulletin board system (BBS) which will contain the following information:

- ▶ Energy related rail transportation system parameters for North American systems.**
- ▶ Energy management related materials and reports for transportation and other industrial applications.**
- ▶ Electric Power Research Institute (EPRI) research results.**
- ▶ Descriptions of rail transportation energy management computer tools as well as computer tools for related applications.**

Since the membership of the EMP will have access to the BBS, provisions were made to have both on-line forums and electronic mail, through which parties could discuss energy related matters.

The membership of the EMP consists of several classes of members.

- ▶ Program partners, who are the operating authorities.**
- ▶ Program associates, who are the electric utilities who provide energy to the operating authorities.**
- ▶ Program affiliates, who represent manufacturers, vendors and service organizations who provide energy related equipment or services to the operating authorities.**

This report is divided into several sections. Section 2.0 describes the content of the database in more detail, with specific emphasis on its structure and its expansion capabilities.

Section 3.0 contains generic descriptions of rail transit authority energy information. The categories of data are defined, together with the kind of data which fits into each of the categories. This information will be kept updated by the partners.

Section 4.0 outlines the energy report index. This index is a bibliography of rail transit energy related reports including such things as rail transit power

systems (both traction and support), propulsion, power rate structures of utilities which service rail transit, energy management and demand side management reports, energy storage and several other topics.

Section 5.0 contains the User's Manual for program members. This manual, which is a slightly modified version of the manual which comes with the software (BBS of Galacticom) used to run the database, is a solid reference to the user.

Section 6.0 covers the present status of the database through the date of this report. It also contains the plans for updating the database as the EMP progresses.

2.0 DESCRIPTION OF DATABASE STRUCTURE AND CONTENTS

This section of the report describes the hardware, software and contents of the database. Two major pieces of content; namely, the transit authority energy information and the energy report index are discussed in more detail in Sections 3.0 and 4.0, respectively.

The purpose of the database is to provide information to the members of the Rail Transit Energy Management Program. This information includes rail transit energy and energy cost data, the results of implementation of energy cost reduction strategies and timely exchange of information concerning energy cost reduction among transit authorities. The database has been set up to expedite these objectives.

2.1 Hardware

The database is presently set up on a Gateway 2000 386/33C. This PC has a hard disk with 85MB and an extended RAM of 16 MB in addition to conventional memory of 640KB.

The communications channel is through a Supra Fax Modem via a serial port on the computer.

2.2 Software

The software chosen for the database is the Major Bulletin Board System (BBS) by GALACTICOMM, Version 6.12. This software is registered to the Rail Systems Center of Carnegie Mellon University.

Bulletin Board Systems are powerful tools for allowing people to communicate with each other at their convenience and retrieve information of interest on a variety of subjects. Whatever the user intent may be - build new contacts, share ideas, obtain computer files, or perform on-line database searches - they find BBS friendly, flexible and powerful.

The EMP database is fully transferable to other PCs as it grows and requires more hard disk space and RAM.

2.3 Contents

Table 2.1 shows the principal (TOP) menu of the EMP database. The "page" references in this menu are also shown in the table.

A page can be one of three types: MENU, MODULE or FILE.

A MENU page displays a menu to the user with choices that lead to either other menu pages, module pages or file pages.

A MODULE page invokes a service which is resident within the database. Electronic mail and forums are examples of MODULE pages.

A FILE page displays a text file to the user.

A MENU TREE is a collection of pages. Each page is either a MENU, a MODULE or a FILE.

The TOP page, which is a MENU, is the base of the tree. Only MENU pages have branches which point to other pages.

Each of the pages of the main menu, shown in Table 2.1, are discussed.

Page INFO (I - Information Center)

Presently, INFO is a MENU page which points to three other pages. These are shown in Table 2.2.

Each of the pages which branch from the INFO page are FILE pages.

- ▶ The EMPDB page (File: EMPDB.TXT) describes the operator of the DB, the DB and its purposes and how to contact the operator.
- ▶ The SHORTCUTS page (File: GALGIC.TXT) describes shortcut methods for accessing pages in the database. These shortcuts bypass the menu/tree route for accessing sections of the database.
- ▶ The HELP page (File: EDBUSER.DOC) is the User's Manual for the database, which is in its entirety, Section 5.0 of this report.

Page - NEWS (N - Energy News)

This is a FILE page (NEWS.TXT) on the database which communicates general news items from the system operator (SYSOP) to all members. News items are kept for two months and then removed.

Page - EDBASE (D - Energy Database)

Presently, EDBASE is a MENU page which points to three other pages. These pages are listed in Table 2.3.

A brief description of each of the pages which branch from the EDBASE page are briefly discussed.

TABLE 2.1

PRINCIPAL MENU OF EMP DATABASE

Page - TOP

Menu	Page Name	Page Type
I - Information Center	INFO	MENU
N - Energy News	NEWS	FILE
D - Energy Database	EDBASE	MENU
E - Electronic Mail	MAILBOX	MODULE
F - Forums	FORUMS	MODULE
A - Account Display/Edit	ACCOUNT	MODULE
R - Registry of Users	REGISTRY	MODULE
S - System Manager	REMOTE	MODULE
X - Exit System (Logoff)	EXIT	MODULE

TABLE 2.2
MENU OF INFO PAGE

Page - INFO

Menu	Page Name	Page Type
A - About the Database	EMPDB	FILE
S - Shortcut Commands	SHORTCUTS	FILE
H - Help (EDBUSER.DOC)	HELP	FILE

TABLE 2.3

MENU OF EDBASE

Page - EDBASE

Menu	Page Name	Page Type
M - EMP Membership List	MEMBERS	FILE
T - Transit Energy Data	TED	MENU
R - Report Index	RINDEX	MODULE

- ▶ The MEMBERS is a FILE page (MEMBERS.TXT) which lists the members of the Rail Transit Energy Management Program. These are divided by Partners (Transit Authorities), Associates (Electric Utilities which serve transit authorities) and Affiliates (the transit supply industry).
- ▶ The TED page is a MENU page which contains the rail transit authority energy and energy cost data, as well as energy management activities and results. The branches from this page are discussed further in Section 3.0. This is the heart of the database.
- ▶ The RINDEX is a MODULE page which contains a search capability of all energy and power related reports in the RSC library. This page is described further in Section 4.0.

Page - MAILBOX (E - Electronic Mail)

The MAILBOX is a MODULE page which provides the E-mail service to the database. It has the following menu items which can be accessed by the user:

- R - Read Messages
- W - Write Messages
- M - Modify a Message
- E - Erase a Message
- S - Special Functions
- X - Exit E-mail

Details on how to use the E-mail functions are discussed in the User's Manual in section 5.0.

Page - FORUMS (F- Forums)

The FORUMS is a MODULE page which provides a forum service on the database. It has the following menu items which can be accessed by the user:

- R - Read Messages
- W - Write Messages
- Q - Quickscan Menu
- F - Filescan
- S - Select a New Forum

In addition, there are FORUMS menu items which can only be accessed by the SYSOP:

- M - Modify a Message**
- E - Erase a Message**
- A - Approve Files**
- C - Configure Users**
- O - Operations Menu**

More detail on all FORUMS functions appear in the User's Manual of section 5.0.

Page - ACCOUNT (A-Account Display/Edit)

The ACCOUNT is a MODULE page which allows the user to view and change information in his account. It consists of the following menu items:

- S - Display statistics on your account**
- A - Display or edit account information (address/phone/password)**

More detail on the ACCOUNT function is given in the User's Manual of section 5.0.

Page - REGISTRY (R-Registry of Users)

The REGISTRY is a MODULE page which allows users to say something about themselves to other users. The menu items in this module are:

- G - General Information**
- D - Directory of Users in Registry ("DA" to start at beginning)**
- Y - Edit your entry**
- L - Lookup another user's entry**
- X - Exit from the Registry Area**

Page - REMOTE (S - System Management)

The REMOTE is a MODULE page which allows the SYSOP to manage the database remotely.

Table 2.4 lists the commands which can be used for remote operation by the system operator.

TABLE 2.4

REMOTE OPERATOR MENU

SENDALL	- Send Message to All	SYSTATS	- View Overall Statistics
SEND	- Send Message to User-ID	MODSTATS	- View Module Usage
LOGON	- Edit BBS Log-on Message	DEMSTATS	- View System Demographics
		CLSSTATS	- View Class Statistics
ACCOUNT	- Accounting functions		
DETAIL	- Detail Info on User-ID	EMULATE	- Emulate a channel
AUDIT	- Display the Audit Trail	MONITOR	- Monitor All mode
USERS	- Stats of Users Online	INPUT	- Monitor Input mode
SEARCH	- Account Database Search	CHANGE	- Change Channel Status
HANGUP	- Disconnect a User-ID	TYPE	- DOS TYPE command
SUSPEND	- Suspend/Unsuspend a User-ID	COPY	- DOS COPY command
PROTECT	- Exempt/Unexempt a User-ID	RENAME	- DOS RENAME command
DELETE	- Delete a User-ID	DIR	- DOS DIR command
SHUTDOWN	- Shutdown the System	MD	- DOS MD command
CLEANUP	- Force Cleanup or Event	RD	- DOS RD command
TRANSFER	- Transfer files	DEL	- DOS DELETE command
SYSOP	- Edit a User-ID's Access		

3.0 TRANSIT AUTHORITY ENERGY INFORMATION

3.1 Introduction

The rail transit authority energy information is the core of the database. The page TED of Table 2.1 is a MENU page which divides the rail transit authorities of North America into two groups; namely, those whose names begin with the letters A-M and those whose names begin with the letters M-Z. Table 3.1 lists the two menu pages associated with the page TED.

TEDAM and TEDNZ are MENU pages which are constructed in the same format. The format is shown in Table 3.2 and 3.3, respectively.

The specific rail transit authorities mentioned in Table 3.2 and 3.3 are listed, together with their page names, in Table 3.4.

3.2 Information on Energy Data Structure

This area of the database describes the structure for the energy data presentation in the database. It is repeated for both the branch pages TEDAM and TEDNZ. Thus, the following material will contain page names relative to both the TEDAM and TEDNZ branches; namely, pages INFOAM and INFONZ.

Page - INFOAM (INFONZ) (A - Information on Structure)

The page INFOAM (INFONZ) is a MENU page whose menu items are shown in Table 3.5.

- ▶ The INFOAMS (INFONZS) page (File: INFOSTRC.TXT) is a FILE page which is described in Section 3.3. This page describes the structure of the specific transit authorities energy data. This data appears under the specific transit authority page names.
- ▶ The INFOAML (INFONZL) page is a MENU page which points to the alphabetical listings of the rail transit authorities of North America in five different ways. These are the file pages:

Page Name	File	Alphabetical Listing By
TALISTN (ZTALISTN)	trandef1.txt	Name of Transit Authority
TALISTA (ZTALISTA)	trandef2.txt	Acronym of Transit Authority
TALISTP (ZTALISTP)	trandef3.txt	Page Name of Transit Authority
TALISTC (ZTALISTC)	trandef4.txt	City for Transit Authority
TALISTE (ZTALISTE)	trandef5.txt	EMM EXT for Transit Authority ¹

¹ This is the EMM input/output file extension reserved for the specific transit authority. The form is filename.ext where, for example, ext = wma for WMATA, = pat for PAT, etc.

TABLE 3.1
MENU OF TED PAGE

Page - TED

Menu	Page Name	Page Type
A - Transit Authorities (A-M)	TEDAM	MENU
B - Transit Authorities (M-Z)	TEDNZ	MENU

TABLE 3.2
MENU OF TEDAM PAGE

Page - TEDAM

Menu	Page Name	Page Type
A - Information on Structure	INFOAM	MENU
B-Z - Specific Transit Authority Names	(See Table 3.4)	MENU

TABLE 3.3
MENU OF TEDNZ PAGE

Page - TEDNZ

Menu	Page Name	Page Type
A - Information on Structure	INFONZ	MENU
B-Z - Specific Transit Authority Names	(See Table 3.4)	MENU

**TABLE 3.4
TRANSIT AUTHORITY LISTING
ALPHABETIZED BY TRANSIT AUTHORITY NAME**

Transportation Authority	Acronym	Page Name	City	State or Prov.	EMM Data .ext
Bi-State Development Agency	BIDA	BIDA	St. Louis	MO	bid
British Columbia Rapid Trans. Co.	BC TRANSIT	BCTRANS	Vancouver	BC	vnc
Calgary Transit	CTCT	CT	Calgary	AL	ct
Chicago Transit Authority	CTA	CTA	Chicago	IL	cta
City of Detroit Dept. of Transp.	DDOT	DDOT	Detroit	MI	det
Dallas Area Rapid Transit	DART	DART	Dallas	TX	dar
Edmonton Transit	ET	ET	Edmonton	AB	edm
Government of Ontario Transit	GO TRANSIT	GOTRANS	Toronto	On	go
Gr. Cleveland Reg. Trans. Auth.	GCRTA	GCRTA	Cleveland	OH	rta
Long Island Rail Road	LIRR	LIRR	New York	NY	lrr
Los Angeles Co. Metro. Transp. Auth.	LACMTA	LACMTA	Los Angeles	CA	lac
MA Bay Transportation Auth.	MBTA	MBTA	Boston	MA	mbt
Mass Transit Administration of MD	MTAMD	MTAMD	Baltimore	MD	mta
Metro-Dade Transit Agency	MDTA	MDTA	Miami	FL	mia
Metro-North Commuter Railroad	MNCR	MNCR	New York	NY	mnc
Metro. Atlanta Rapid Trans. Auth.	MARTA	MARTA	Atlanta	GA	mar
Metro. Trans. Auth. of Harris Co.	MTA-HARR	MTAHARR	Houston	TX	mtn
Metropolitan Rail	METRA	METRA	Chicago	IL	mtr
Miami Valley Reg. Transit Auth.	MVRTA	MVRTA	Dayton	OH	mva
Montreal Urban Comm. Trans. Corp.	MUCTC	MUCTC	Montreal	PO	muc
Municipality of Metro. Seattle	MMS	MMS	Seattle	WA	mms
N. IN Commuter Transp. District	NICTD	NICTD	Chicago	IN	ssh
New Jersey Transit Corporation	NJT	NJT	Newark	NJ	njt
New York City Transit Authority	NYCTA	NYCTA	New York	NY	nyc
Niagara Frontier Transp. Auth.	NFTA	NFTA	Buffalo	NY	nft
Port Auth. Trans-Hudson Corp.	PATH	PATH	New York	NY	pth
Port Authority of Allegheny Co.	PAT	PAT	Pittsburgh	PA	pat
Port Authority Transit Corp.	PATCO	PATCO	Lindenwold	NJ	ptc
Regional Transit Authority	NORTA	NORTA	New Orleans	LA	no
Regional Transportation District	DRTD	DRTD	Denver	CO	dnv
S.E. PA Transportation Auth.	SEPTA	SEPTA	Philadelphia	PA	sep
Sacramento Reg. Transit District	SRTD	SRTD	Sacramento	CA	srt
San Diego Trolley, Inc.	SDTI	SDTI	San Diego	CA	sdt
San Francisco Municipal Railway	MUNI	MUNI	San Francisco	CA	mun
San Francisco Bay Area Rapid Trans.	BART	BART	San Francisco	CA	bar
Santa Clara Co. Transp. Agency	SCCTA	SCCTA	San Jose	CA	scc
The Hamilton Street Railway Co.	HSRC	HSRC	Hamilton	ON	ham
Toronto Transit Commission	TTC	TTC	Toronto	ON	ttc
Tri-Co. Met. Transp. Distr. of OR	TRI-MET	TRIMET	Portland	OR	tri
Wash Metro. Area Trans. Auth.	WMATA	WMATA	Washington	DC	wma

TABLE 3.5

MENU OF INFOAZL (INFONZL) PAGE

Page - INFOAM (INFONZ)

Menu	Page Name	Page Type
A - Database Structure	INFOAMS (INFONZS)	FILE
B - Transit Authority Listing	INFOAML (INFONZL)	MENU
C - Rail Transit EMM	RTEMM (RTEMMZ)	MENU

- ▶ The RTEM (RTEMMZ) page is a MENU page which points to the following file pages:

Page Name	File	Comment
EMMMOD (EMMMODZ)	EMMMOD.TXT	EMM Description
EMMDATA (EMMDATAZ)	EMMDATA.TXT	EMM Data Files Convention

3.3 Transit Energy Data Structure by Specific Transit Authority

The specific transit authority information can be split up by type of rail; namely, heavy rail (HR), light rail (LR), commuter rail (CR), or trolley bus (TB) and/or different lines which the authority operates. Actual splitting will occur only on information which is kept by the transit authority in that manner.

The key to the storing of transit authority information lies in the Energy Management Model input/output file extension (.ext) usually designated as .ext for general discussion purposes. A list of these extensions is shown in Table 3.4.

The specific TA information is broken down into the following areas:

Area	Page Name
General Information	Gext
Operating Information	Oext
Vehicle Information	Vext
Power Distribution	Pext
Power Rate Structure	Rext
Power Costs	Cext
Energy Management	Mext
Future Energy Plans	Fext
EMM Data	Dext
Miscellaneous Information	Sext

A description of the kind of information in each of these areas follows.

▶ **General Information (page: Gext)**

Includes TA name, address, phone, fax, contact person and a brief introduction to the rail system of the transit authority.

▶ **Operating Information (page: Oext)**

Includes ridership data, vehicle usage, energy and operating costs. In general, this information would be included in the Section 15 reporting of the TA. The section also includes operating timetables, average dwell times at stations, terminal turnaround times and passenger load factors between stations.

▶ **Vehicle Information (page: Vext)**

Includes the physical characteristics of the vehicles and data on the propulsion, auxiliary, and friction braking subsystems on the vehicles which affect energy consumption. Parameters characterizing train resistance, equivalent rotational weight, acceleration, jerk and deceleration limits are also included here.

▶ **Power Distribution (page: Pext)**

Includes the meters, substations, tiestations, high voltage transmission, power delivery voltages, third rail, trolley or catenary voltages, circuit conductivities, and other power distribution data.

▶ **Power Rate Structure (page: Rext)**

Includes the rate schedules of each electric utility serving the lines of the TA.

▶ **Power Costs (page: Cext)**

Includes details of power costs, demand and energy related as well as historical trends.

▶ **Energy Management (page: Mext)**

Includes energy management activities that have been conducted by the authority: the results and recommendations of studies and implementation and followup work on effectiveness.

▶ **Future Energy Plans (page: Fext)**

Includes plans by the TA which will affect future energy consumption such as rail expansion, new systems, increase of ridership, and energy conservation measures not yet implemented.

▶ **EMM Data (page: Dext)**

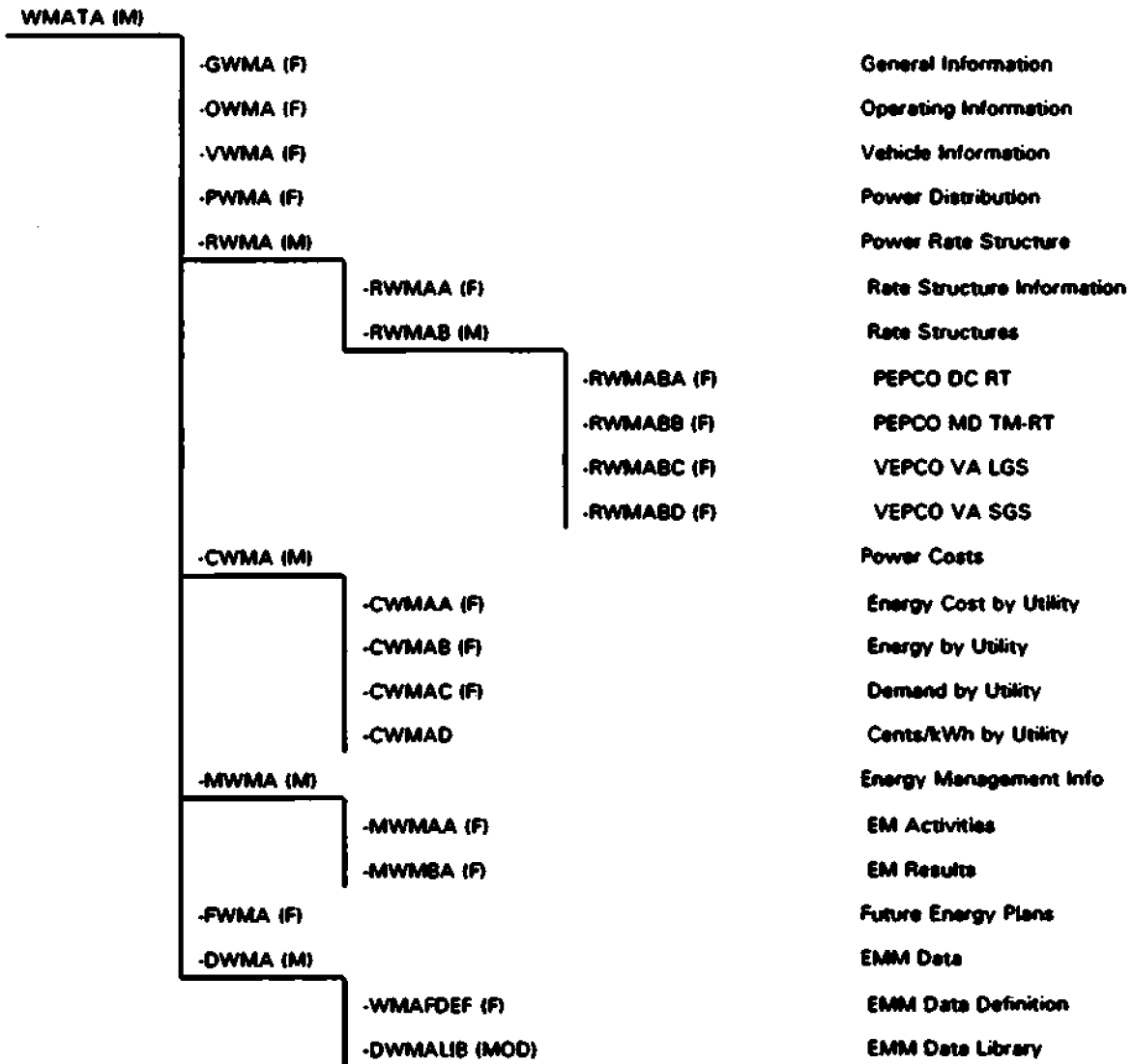
Input data structured to be run on the Rail Transit Energy Management Model (EMM). These include files for the Train Performance Simulator (TPS) and the Electric Network Simulator (ENS). The EMM description is found on the FILE page EMMMOD (EMMMODZ). The input/output data conventions for the transit authorities are described on the FILE page EMMDATA (EMMDATAZ).

▶ **Miscellaneous Information (page: Sext)**

Miscellaneous information having to do with energy use or cost. This could vary depending on the transit authority.

Figure 3.1 shows the EDB tree for WMATA.

FIGURE 3.1
THE WMATA TREE IN THE EDB



() indicates type of page
F - File
M - Menu
MOD - Module

4.0 ENERGY REPORT INDEX

The RSC is contributing a bibliography of energy cost/power reports to the EDB. These will be listed on the EDB and can be ordered by members for a nominal copying fee.

The index of reports has been included into two text files which are searchable through a search & retrieve module of the BBS. The MODULE page RINDEX initiates the search & retrieve module on these two files.

The menu of the page RINDEX is listed in Table 4.1. The category name is RSCLIB.

There are two major files in the RSCLIB; namely, LIBR.TXT and EPRI.TXT.

The LIBR.TXT is an index of over 840 reports which are presently in the library of reports of the RSC. These reports address the subjects of rail transportation related to

- ▶ **Advanced Systems (Energy)**
- ▶ **Braking Systems and Components**
- ▶ **Demand Side Management**
- ▶ **Economics (Energy)**
- ▶ **Energy**
- ▶ **Energy Cost**
- ▶ **Energy Cost Reduction**
- ▶ **Energy Management**
- ▶ **Energy Storage**
- ▶ **Network Simulation**
- ▶ **Passenger Operations (Energy)**
- ▶ **Power Demand**
- ▶ **Power Distribution Systems & Components**
- ▶ **Power Rate Structures**

- ▶ **Propulsion Systems & Components**
- ▶ **Signals, Control and Communications (Energy)**
- ▶ **Simulation and Analytical (Energy)**
- ▶ **Train Performance**

The EPRI.TXT is an index of over 200 EPRI reports which are resident in the RSC library. These reports cover the same subject areas previously covered.

TABLE 4.1

MENU OF RINDEX PAGE (SEARCH & RETRIEVE)

- S - Search files in current category**
- L - List files in current category**
- V - View a file in current category**
- X - Exit**

5.0 THE RAIL TRANSIT ENERGY PROGRAM DATABASE (USER'S MANUAL)

Welcome to THE RAIL TRANSIT ENERGY PROGRAM DATA BASE (EDB) !!

If you've used the EDB before, you'll probably have no trouble finding your way around. If you haven't, this document is intended to help you learn your way around. A few basics to keep in mind: if you want to exit from wherever you are in the system, select X; all selections and commands must be followed by a RETURN; on menus (and most prompts) you may select ? for help; and hit the RETURN key to abort lengthy scrolling displays.

This document will serve two purposes: 1) to help you get started (using the EDB for this first time), and 2) to be a reference for you, even after you've found your way around (to answer the question, "I wonder... is there a way to do <blank> in the <blank> module?").

5.1 A Quick Overview

When you first call into the EDB, you have already been signed in, having an account for yourself. If you're online reading this document, you should now have a User-ID and password that you can use from now on. Now, when you call in, all you have to do is enter in your User-ID and then your password. The EDB will remember who you are, and start by telling you if you have any mail waiting (it may also ask you if you want to read it right away). You might also get some other important notices, but will eventually be left at the TOP menu.

The TOP menu is the first menu on the EDB. The various selections on this menu go to different areas of the EDB. Here is what the TOP menu looks like:

Please select one of the following:

I ... Information Center	(get some info on this system)
N ... Energy News	(latest info on energy happenings)
D ... Energy Database	(the heart of the system)
E ... Electronic Mail	(send messages to other users)
F ... Forums	(read/write public messages)
A ... Account Display/Edit	(edit/view your account info)
R ... Registry of Users	(look up users' registry entries)
X ... Exit System (Logoff)	(logoff the system)

(TOP)

Make your selection (I,N,D,E,F,A,R,? for help, or X to exit):

By typing in one of the select characters, followed by a RETURN, you can enter any of these different areas. As an example, this is how you might go about leaving a private E-mail message to your Sysop (System Operator -- the person who runs this system). First, select E to go to E-Mail, which will bring you to this menu:

The following E-mail services are available:

R = >	Read message(s)	(read any mail TO or FROM you)
W = >	Write a message	(write mail to any other user)
M = >	Modify a message	(modify a message you've written)
E = >	Erase a message	(erase a message you've written)
S = >	Special functions	(configure your personal mailbox)
X = >	Exit from E-mail	(exit back to the TOP menu)

Select a letter from the above list, or ? for more info:

Now, in this example, you would select W to write mail. That selection would bring you to this prompt:

Who do you wish to send this message to?
Enter User-ID, "?" for help, or just RETURN for "Sysop":

In this example, you'd only have to hit a RETURN (with no selection) to specify "Sysop". If you wanted to write mail to someone else, you would simply type in their User-ID here (if you don't know the whole User-ID, but only know the first or last name, you can just enter what you know, and the EDB will help you find the exact User-ID).

Now, you'll be asked for the topic of your message. After entering in a topic, you'll be put into the editor. Depending on whether or not the terminal you're using to call in with has ANSI support, you may get the Full Screen Editor. This ANSI editor will act very much like a small word processor, allowing you to use your cursor keys to move around the message. You can feel free to just type your message as you wish it to appear to your Sysop. The automatic word-wrap will wrap words at the end of lines appropriately. Just hit CTRL-G whenever you are done, and want to save your message. Hit CTRL-O if you changed your mind and want to quit. All sorts of advanced commands are also available. Just hold down the control key and hit R (CTRL-R) to display some other commands:

HELP (CTRL-W for more)	
CTRL-Z Select Terminal	CTRL-L Redisplay Screen
CTRL-K CTRL-Q Quit	CTRL-K CTRL-X Save and Quit
CTRL-T Change Topic	CTRL-W Extended Help
CTRL-X Exit to Line Edit	CTRL-N Import Message

Line Commands:	CTRL-K CTRL-U Upload File
CTRL-B Insert Line	CTRL-Y Delete Line
CTRL-C Chop Line	CTRL-J Join Line
CTRL-A Center Line	CTRL-E Erase to End of Line
CTRL-F Insert character	CTRL-V Delete character

Block Commands:	
CTRL-K CTRL-B Mark Start	CTRL-K CTRL-K Mark End
CTRL-K CTRL-H Hide Block	CTRL-K CTRL-F Frame Block
CTRL-K CTRL-Y Delete Block	CTRL-P Format Paragraph

--- HIT ANY KEY TO RETURN TO EDITOR ---

If you don't have ANSI support, you'll get the line editor. The line editor doesn't allow you to move around with your cursor keys like the Full Screen Editor, so you have to enter your message one line at a time. (The automatic word-wrap feature will wrap the end of lines for you, just like the ANSI editor.) When you're all done entering your message with the line editor, and you want to go ahead and save it, just enter /S on a blank line by itself. If you want to change something about what you've written so far, you can edit the message by typing OK on a blank line by itself. That will give you this menu:

EDITOR OPTIONS:

S)ave message	R)e-type a line
A)ppend message	D)elete line
L)ist message	I)nsert line(s)
C)hange text	N)ew message
H)elp	T)opic change
U)pload file	

Select an editor option (S,A,L,C,H,R,D,I,N,U, or ? for menu):

When you're done editing your message, just select S from this menu to save your message. Then, you'll get this prompt (you come to this same prompt by typing /S in your message instead of typing OK and editing):

Do you wish to "attach" a file to this message (Y/N)?

If you answer Y to this question, your topic will be used as the file name (you'll get a chance to re-enter your topic if it's not a valid one), and you'll be asked to upload a file to the EDB. When the Sysop reads your mail, he'll be asked if he wants to download the attached file. Answer N if you don't need to send a file along with the message. After all that, you'll get:

Do you want a "return receipt" when this message is read (Y/N)?

In other words, when the Sysop reads your message, do you want an E-mail message to be sent to you immediately, letting you know when the Sysop read it? Just enter Y or N (followed by a RETURN, as usual) as a response. You'll then get this prompt:

Do you want to send a copy of this message to anyone (Y/N)?

You can send copies of your message to other User-IDs if you wish. If you answer Y to this question, you'll simply be prompted for which User-ID you want to send a copy to, and then asked if you want to send any more copies.

That's all there is to writing E-mail to the Sysop. The only difference between writing mail to the Sysop, and writing mail to any other User-ID is the name you type in when you're prompted for who you want to write the message to. When you're done, you'll find yourself back at the main Electronic Mail menu, where you can hit X to get back to the TOP menu. (Remember, when you decide you're ready to log off, just select X from the TOP menu.)

This is only the tip of the iceberg as far as features are concerned. The rest of this document contains more in-depth information about the vast number of other features that this EDB has to offer. If you have any problems finding your way around, just leave some E-mail to the Sysop asking for help. When the Sysop replies to your message, you'll be notified as soon as you log on that you have new mail waiting. If you're not given the option to read it right away, just select "ERT." From the TOP menu to read your new mail.

5.2 Modules and Menuing

The EDB is divided into two major sections: the main menuing system and the modules. Just after logging on, you enter the main menuing system, where you can choose to enter different areas of the EDB, exit from them, and choose others. It's the main menuing system's job to guide you to and from the many features available to you. The different modules in this system are what provide you with the main functionality of the EDB: exchanging messages, talking to others, uploading and downloading, etc. (The different modules are each discussed later in this document.)

5.2.1 The Main Menuing System

The main menuing system of the EDB will allow you to choose different menu options, leading you into different areas, or modules, of the EDB. Each main menu you encounter will display the options that you have available to you, and then await your selection. To enter in any selection or command on the EDB, you must type it in, and then hit RETURN. Each

menu and menu selection is also called a "page", and has a name of its own. (The first menu you are given is named the "TOP" page.)

There are a few things you can do at any of these menus: go back to the previous page, jump straight to another other page, find another page to jump to, or re-display the current menu. Select X at any of these menus to return to the previous menu (selecting X from the TOP menu will allow you to log off the system). Just hit RETURN (with no select character) to re-display your current list of options. To jump straight to another page, type /GO <pagename>. To look for a page containing a specific topic of interest, type FIND, followed by the topic to look for. Any pages that you can /GO to that refer to that topic will be displayed.

5.2.1.1 Global Commands

Global commands are commands that begin with a / character, and are available to you from any prompt on the EDB. Here are a few standard global commands:

/GO <pagename>	Jump straight to a specific page name
/#	Show a list of other users online
/P <userid> <msg>	Page another user on the system (with an optional message)

5.2.1.2 Concatenated Commands

You can probably find most things you're looking for by just going through menus one at a time. But, concatenated commands allow you to save time by bypassing menus you already know your selection for. The idea is this: If selecting E from your current menu leads you to the main Electronic Mail menu, and you know you want to write mail, which is the W selection from the main electronic mail menu, you can just select EW from your current menu to entirely bypass the main Electronic Mail menu. You can even bypass some prompts by concatenating your selection ahead of time. Some prompts have "defaults", meaning you just hit a RETURN for a certain action. At the prompt for who to write mail to, just hitting RETURN means you want to write mail to "Sysop".

In the above example, you could specify you wanted to write mail to your Sysop by selecting EW. from your current menu. Basically, by putting a dot (.) in your concatenated command (as opposed to a select character), you are saying "at this prompt, act as if I just hit RETURN, and give me the default".

As you become more familiar with this system, you will find that using concatenated commands may save you quite a bit of time. Most prompts and menus support concatenated commands, so you can feel free to experiment with using concatenated commands throughout the system.

5.2.1.3 File Transfers

In different areas of the EDB, you will have the opportunity to transfer files from your computer to the EDB, as well as from the EDB to your computer (referred to as uploading and downloading files, respectively). File transfers can be accomplished through a wide variety of "protocols", each of which have different characteristics, but all of which will have the same end-result: transferring a file (or files) between your machine and the EDB. This section simply introduces you to the options available to you through the EDB.

To get you started, here's a quick rundown on the most popular protocols and their highlights:

L = List	display a text file one screen at a time
C = XMODEM-CRC	has very widespread usage, simple and to the point
B = YMODEM Batch	widespread usage and full featured, gets the file size right, and sometimes date and time too
Z = ZMODEM	robust and efficient
K = Kermit	works on 7-bit communication lines

Download Protocols:

L ... Listing (a screen at a time)	G ... YMODEM-g
A ... ASCII (continuous dump)	Z ... ZMODEM
M ... XMODEM-Checksum	ZR... ZMODEM (resume after abort)
C ... XMODEM-CRC	K ... Kermit
1 ... XMODEM-1K	V ... View compressed file contents
B ... YMODEM Batch	
T ... Tag file(s) for later download	

(Add '!' to automatically log off when done)

Upload Protocols:

A ... ASCII	B ... YMODEM Batch
M ... XMODEM-Checksum	G ... YMODEM-g
C ... XMODEM-CRC	Z ... ZMODEM
1 ... XMODEM-1K	K ... Kermit

(Add '!' to automatically log off when done)

The terminal software you're using to call the EDB may not support all of these protocols. Be sure to pick one that your terminal supports. (In most terminal programs, hit PgUp to get a list of upload protocols, and PgDn to get a list of download protocols.) The ASCII and LIST protocols will only work with ordinary ASCII text files. The other protocols will work on all types of files.

Another protocol option will appear automatically when you're about to download a compressed file (or files). Examples of these are .ZIP or .ARC files: files that each contain one or more other files (in a compressed form). The option V will appear in these cases, allowing you to view what file(s) are compressed into the .ZIP, .ARC, .ZOO, or .LZH file.

Another download option that may be available is T to tag a file. This feature allows you to tag up to 10 files for download, and then, when you're ready (or when you log off), you can download all your tagged files at once.

Another time-saver is the ! suffix. You can put an ! character at the end of your protocol selection to have the EDB automatically log you off when the file transfer is over. This way, if you're not around to disconnect yourself when done transferring a large file, the EDB will disconnect you automatically, possibly saving you connect time charges.

5.2.2 Modules

Modules provide the actual areas of functionality of the EDB. Each module provides unique features to you, and can be selected from the various menus in the main menuing system. Below is a list of modules, each with an explanation of its features. (This document may change from time to time as new modules are added to this system.) The modules currently available to you are:

5.2.2.1 The Messaging System

Messages are used in both the Forums and the Electronic Mail areas.

Electronic Mail: private messages from one user to another

Forums: public messages from many users, readable by many

There's a lot of overlap between the Electronic Mail and Forums. For example, when you write an electronic mail message, you can send it to one user, and send a carbon copy to a Forum. Or you can reply privately to the author of a Forum message, and other users won't see that reply. And usually the best way to erase a message you wrote in a Forum is to use the E-mail read command to find it and then erase it.

Electronic messages consist of:

- ▶ **Header**
- ▶ **Body**
- ▶ **File attached (optional)**

The header contains information like who the message is to, who it's from, what the topic is, and when it was written.

Message Topic:

Each time you write a new message, you need to give it a topic. When you reply to a message, you inherit the topic of the original message.

Message Body:

You can compose the body of a message you're writing using the editor. You'll get the full screen editor if you have an ANSI-compatible terminal. Otherwise you'll use a line-oriented editor.

Reading a message displays the message body on your terminal. Whenever you read a message's body, the EDB makes a note not to include that message again when you scan for new messages.

Message Number:

The EDB issues a new sequential message number each time anyone writes a new message. Whether it's a private electronic mail message to one user, or a message in some Forum, it has a unique message number on the EDB. This message number is used to jump directly to a message you want to read or reply to.

Files Attached to Messages:

When you write an Electronic Mail or Forum message, you usually have the option of attaching a file to the message. You upload the file after you write the message. Then, anyone who reads the message gets the option of downloading the file.

File Names:

When you attach a file to a message, put the name of the file in the topic of the message. You can put the description of the file after that. For example:

Topic: FONTCVT.EXE - converts printer fonts

This file name will be used when a user downloads with a multi-file protocol like YMODEM Batch or ZMODEM. That is, the file's name on the user's machine will be FONTCVT.EXE. File transfers will be discussed in more depth later.

Modifying or Erasing a Message You Wrote:

First, find the message. Whether its a Forum message or an Electronic Mail message, you can find it from the Electronic Mail menu. You can (R)ead all messages (F)rom you, and scan through them until you find the one you want to change. After reading your message you'll get the chance to modify it by selecting the M option. To just erase a message, find it, read it, and select E to (E)rase.

On the other hand, if you know the number of the message you want to modify or erase, there's another way. Just use the (M)odify or (E)rase option from the Electronic Mail menu. It will work on Forum messages you wrote as well as on Electronic Mail messages.

5.2.2.2 Electronic Mail

Electronic Mail allows you to send private messages to other users of the EDB. Electronic Mail has several advantages over other modes of communication:

- ▶ You can dial into the EDB from almost anywhere, at almost any time, write your message, and forget about it -- no stamp, no paper to carry around.
- ▶ The recipient of your message has a copy he can capture and print out if he wants. Or he can leave the message in his "in-box" and get it out later.
- ▶ You can attach a disk file to your message. No need to mail floppy diskettes, or to bring up two computers with file transfer software at the same time. You upload when you want, your recipient downloads when he wants.
- ▶ You can request a return-receipt, so you know when the person read your message.
- ▶ Your recipient can easily reply to your message, sending another message back to you. Your original message will usually be available to you again so you can "backtrack" and remember what the user was replying to.
- ▶ You can easily copy your message to other users.

- ▶ You can send your message to distribution lists.
- ▶ You can create one distribution list of your own.

Electronic Mail Messages

Here's what an electronic mail message header looks like:

```

Date: Thursday, April 23, 1992 12:37pm      Electronic Mail
From: Arthur Fischel                        Msg#: 20483
To: Richard T. Natheson                    *RETURN RECEIPT REQUESTED*
File: BOOTH.DWG - for trade show in Phoenix
(Reply to #20461, Reply to #20409)

```

The *RETURN RECEIPT REQUESTED* flag indicates that the sender wants to be notified when you read this message. When you do, a message is automatically generated by the EDB from you back to the author of the message, informing him that you read his message and when.

Files Attached to Electronic Mail Messages

To send a file to another user, you can write him an electronic mail message and upload an attached file. When he reads the message, he has the option of downloading the file.

R = Read messages

The EDB keeps track of the messages that were written to you and the messages that you have written.

In-box messages TO you messages others wrote to you

Out-box messages FROM you messages you wrote to someone else

Either of these sets can be scanned, one message at a time, with the E-mail read command. These include private messages between you and other users as well as public messages in the Forums. (Whether your in-box includes Forum messages or not is your option: see below, under setting preferences.)

R = Read messages T = To you

You'll have these options for where to start your reading:

```

RETURN or dot (.)   Start with the next message you haven't read yet
F                   Start with the earliest message in your in-box
L                   Start with the very latest message in your in-box
<message number>  Start with a specific message number

```

The Default or Next Message

You'll probably be calling into the EDB regularly to get your latest messages. Some of your messages are not urgent, or they require more work to reply to, or you just want to keep them around for a while.

The EDB tries to distinguish between new messages and messages you've already read by remembering the highest numbered message you've ever read from your in-box. This isn't perfect, but if you're careful to read your messages in order, you might find it very handy for keeping your urgent mail and your not-so-important mail separated.

When you (R)ead messages (T)o you and hit RETURN when it asks for a message number, you'll get the message that's one higher than the highest numbered message that you've already read. You can do the same thing in one step by typing "RT." from the E-mail menu.

As an example, imagine you have an in-box tray on your desk. New mail is always getting added to the top of your pile. You often peek at your mail starting from the bottom. After you read a piece of mail that you want to keep for the moment, you slip a piece of red paper over it. When you read another piece, you slip the red paper over it. Now you have new mail on top, red paper, old mail. To quickly see if you have new mail, see what's on top of the red paper.

Here's what some other E-mail commands are like (these are the concatenated command sequences -- you can enter one letter at a time to have all the prompts displayed):

E-mail for		
Command	Reading	Analogous to
RTF	Old mail	Scanning from the bottom of your mail up
RT.	New mail	Scanning from your first new message up
RTL	Latest mail	Scanning from the last message in your box

Sometimes, you read a message and just can't handle the message right away, but you don't want to forget about it. There is a way to make a message you have already read new again: forward it to yourself. Then, next time you log on, it will appear as new mail again, and you can deal with it then.

So, in Electronic Mail, the default or next message is the message right after the highest numbered message that you've already read. You actually need to read the message (see the body of it) for it to be counted as "old" mail.

R = Read messages F = From you

Messages "from" you include all the E-mail and Forum messages you've written that are still on the system.

After finding and reading a message you've written, you may get these options:

(E)rase this message, (M)odify it, (P)revious or (N)ext message?

Read Commands

RTF Read all your incoming mail, starting with the earliest message

RT. Read your incoming mail, starting with "new" mail

RTL Read your latest piece of incoming mail.

RFF Read the earliest piece of outgoing mail

RFL Read your latest piece of outgoing mail

(R)eply to the message

When you reply, you are writing a new message back to the author of the original message.

If your E-mail preferences have been set to allow message quoting, you can use pieces of the original message in your reply, and address each point directly (more on personal preferences below).

Replying without Erasing

You can set your E-mail preferences to automatically erase when you reply to an E-mail message, or to leave the original message in your in-box. But even if you're set up to automatically erase, there is a way to get around it, and save the original message.

Say you're typing in a reply to a message, and you decide you don't want to lose the original message. Maybe you want to keep it on file, or you want to send a copy to someone. The way to skip the automatic deleting of the original message is to hit X to exit before the deleting takes place. The place to do this is the carbon copy question. When you're asked about carbon copies, your message has already been saved and stored, and the original has not yet been deleted. It would get deleted if you answered N to the carbon copy question. Instead:

Do you want to send a copy of this message to anyone (Y/N)? X

(Don't exit from the attach-file or return-receipt question -- you'll lose your reply entirely.)

(E)rase the message

After reading an E-mail message to you, pick this option to just get rid of the message.

(C)lear message

After reading a Forum message, pick this option to remove it from your in-box. You won't delete the message this way -- it will still reside in the Forum, but will not show up in your in-box any more.

(F)orward the message

Forwarding the message is like handing a piece of mail to someone else. They get the message and it disappears from your "in-box".

Reply after Forward

In some cases, you may want to both reply to a message and forward it to someone else. The dilemma is that either of these operations by itself usually leaves you with no message. You can both send the original message to a third person, and send a reply to the original author by invoking the reply after forward option. To use this, you need to enter "F <User-ID> R" all on one line.

You could also send a carbon copy of the reply to the third person after you're done writing the reply.

(C)opy the message

Copying the message sends a copy of it to another user. You keep the original message in your in-box.

(B)acktrack to the original message

After viewing a reply to one of your messages, you can view the original message using the (B)acktrack option. This is very helpful when you can remember asking someone a question, you now have their answer, but you can't remember the question. Backtrack brings it up if it's still on the system. Even if the other user deleted your message from his in-box, your message still remains sort of hidden in your out-box, just for this purpose.

(P)revious or (N)ext message

Skip chronologically through the messages in your in-box or out-box with the (P)revious or (N)ext commands. Any time you're viewing a message header or body, or you've just downloaded an attachment, you can usually move around to other messages with (P)revious and (N)ext.

W = Write a message

You can write an electronic mail message to:

<User-ID>	a specific user
RETURN	to the Sysop
/<forum>	to a Forum
@<list>	to a distribution list
!quick	to your own custom distribution list
!mass	to all users (special access may be required)

When writing to an individual user, if you can't remember their User-ID exactly, just type in an approximation and the EDB will try to find a match. When writing to a Forum from E-mail, you are writing to ALL users in the Forum (more on the Forums later).

Attach a file?

After you write a message, you get the option of uploading a file and attaching it to the message (assuming you have access).

Do you wish to "attach" a file to this message (Y/N)?

Be careful to complete this step or your message will get lost. For example, if you type X to exit instead of yes or no, you'll lose the message you just wrote.

Return Receipt?

The next option after deciding on the attached-file issue is whether you want to be notified when the recipient reads your message.

Do you want a "return receipt" when this message is read (Y/N)?

A return receipt is a brief message that the EDB automatically generates from the reader when he first reads the message.

After answering the return-receipt question, the message is actually saved and stored.

<<< CONFIRMED: MESSAGE #78933 WRITTEN TO DISK >>>

It's important that you at least get to this point in writing a message. If you don't, and you X=exit back to the E-mail menu, or lose carrier, your message will be lost.

If the person you're writing to is also online when you get to this point, he may get a BEEP and a message on his terminal like:

...

Irving R. Neely has just written an E-mail message to you!
(You can find it by invoking (E)mail (R)ead-msgs (T)o you.)

Carbon Copies?

You can send copies of the message you've written to other users.

Do you want to send a copy of this message to anyone (Y/N)? Y

Who do you wish to send a copy of this message (cc:) to?
You may also type "?" for help: ED CHAVEZ

```
<<< CONFIRMED: MESSAGE #79833    COPIED TO #79834    >>>
      <<<          SENT TO Ed Chavez          >>>
```

Do you want to send a copy of this message to anyone else (Y/N)? N

By the way, you may be able to save time by answering all three questions at once
(using concatenated commands):

Do you wish to "attach" a file to this message (Y/N)? NNN

This means the message has no attached file, no return receipt requested, and no
copies to anyone.

M = Modify or E = Erase a message

You need to know the message number before you can use either of these options.
You can find the message number of a message you wrote by (R)ead mail (F)rom
you and scanning (N)ext or (P)revious until you find the one you're looking for.

S = Special functions

This is a little menu for managing various features of your Electronic Mail
"mailbox".

Choose a special function:

- C = > Configure distribution list
- A = > Auto-forward incoming E-mail
- S = > Set personal preferences

Your choice (or X to exit)?

S = Special functions, C = Configure distribution list

Your distribution list can have up to 40 entries. When you write a message to
!QUICK, the EDB will send it to all of the names you have put in your list.

There's no checking for correct User-ID's. You can even specify users who haven't signed up yet. But be sure and get their User-ID exactly right (except it doesn't matter whether you use upper or lower case).

S = Special functions, A = Auto-forward incoming E-mail

You can set things up so that all mail written to your User-ID will be automatically forwarded to another User-ID. This is helpful if you're going to be out of town for a while and someone is keeping on top of your messages. Or, if you want to change your User-ID, you can forward messages from the old User-ID until everyone gets used to using the new User-ID.

This forwarding is not apparent to whoever is writing the message.

Forum messages to you are not affected by auto-forwarding. They'll still appear in your original in-box (if you have your preferences set to include Forum messages in your in-box -- see below). Also, enabling auto-forward only affects future messages -- any E-mail currently in your in-box remains there. For example:

User-ID to auto-forward E-mail to (X to exit): SAM JONES

S = Special functions, S = Set personal preferences

You can personalize your mailbox with these options:

1. Should replying to E-mail messages erase them? (default is YES)

NO: the messages will remain in my in-box.

YES: replying to an E-mail message automatically erases it, and replying to a Forum message automatically clears it from my in-box.

2. How to handle new messages when you log on? (default is 3)

1. Read them immediately.
2. Ask me if I want to read them immediately.
3. Just notify me that I have new mail waiting.

3. Should Forum messages that are directed to you appear in your E-mail in box? (default is YES)

When you read your E-mail, you may also want to be notified of any new messages directed to you in the Forums.

YES: mix these in with my private E-mail.

NO: don't bother me about them. I'll just have to see them in the Forums or not at all.

4. When will you want to quote excerpts of a message when replying to it?
(default is 3)

1. Sometimes (ask me each time I reply to a message)
2. Always
3. Never

Replying to a message with quoting is something like taking a business letter and scribbling your comments in the margins and mailing it back to the sender, only neater.

When you reply with quoting, you start out, not with a blank message, but with the contents of the original message filling up your screen. You can delete and insert as appropriate to address each part of the original message specifically. This is very helpful to the original author, especially when he writes you very large messages.

5.2.2.3 Forums

Forums are for gathering people and information.

In a forum, lots of people write messages and lots of people read or search or scan messages. You can direct a message to all users, or to a specific user. You can search for messages in many ways: chronologically, by topic, by conversation "threads", by message content, by lists of keywords, or by the unique message number. You can also search in the same ways for messages with files attached. There are other features we'll get to later.

Here's an example Forum menu:

Your current Forum is /Hello: Welcome to the EDB!

- R => Read messages
- W => Write a message
- Q => Quickscan Menu
- F => Filescan
- T => Teleconference
- S => Select a new Forum
- X => Exit from Forums

Select a letter from this list, or ? for more info:

When you first log on, you'll probably be in a welcoming or introductory Forum like this "/Hello" Forum.

S? = See a list of Forums

Before you do anything else in the Forums, you'll probably want to see what Forums are online. Entering S? will display to you a list of Forums available to you.

S = Select another Forum

Use S to select another Forum. Once in another Forum, you get the same menu, with the new Forum name and description at the top.

Messages in a Forum

Here's what a message header looks like in a Forum:

```
Date: Monday, April 27, 1992 11:23am      /IntSales
From: Stuart Blaumberg                  Msg#: 108782
To: Cristina Rodolfo
Re: Singapore sales office (impressive growth!) (7 replies)
(Reply to #108623, Fw by Tom Gerhart)
```

Who a Message is To

You can write a message in a Forum to a specific user, or to **** ALL **** users. Either way, the message is visible to anyone who has the proper access to the Forum. Writing a message to a specific user gets his attention when he reads his mail (assuming his preference settings include Forum messages in his in-box).

When writing to an individual user, if you can't remember their User-ID exactly, just type in an approximation and the EDB will try to find a match.

All replies in a Forum are automatically directed to the writer of the message you're replying to. Keep this in mind when adding your own message to a thread: Which message would be best to reply to? Which user are you really speaking to, or who do you want to see your message most?

Files in a Forum

The Forums emphasize messages. Files in a Forum are always attached to messages.

You can think of the way files are kept in a Forum in two ways:

- A message with a file attached
- A file with a detailed description

Either way it's the same thing. A message can incidentally have a file attached to it. Or the message can be a description or introduction to the file.

By convention, the topic of a message with a file attached contains the file name and a brief description of the file. Nothing requires this, although whenever anyone uploads a file they are encouraged to put a file name in the topic field.

If you have an ASCII file that you want to contribute to a Forum, the easiest thing to do is write a message and upload the file as an attachment. (You can use any upload protocol, not just the ASCII protocol.) The message could be empty, or explain something like "here's the file that ...". Other users can use the ASCII or LIST download protocols to see the contents on their terminals.

When you write a message to a Forum, you have the option of uploading a file and attaching it to the message. When you read a message that has a file attached, you get a chance to download the file.

Threading

A thread is a bunch of messages on the same topic. You'll probably find many different threads going on at the same time in a Forum. Say you write a message and somebody else writes a reply to it. You reply to that, someone else replies to it too, and then someone else replies to your original message. Before you know it, a tree of messages is formed. All of these messages usually keep the same topic. We call this a thread.

When you're scanning messages, you may come across a message with a lot of replies, or one that's a reply itself. You can digress from your scan to see what else has taken place on this thread before you contribute yourself.

Threading forward and backward is chronological. So in a complex thread you won't always see a message next to its reply. You may see the messages of one little sub-conversation alternating with those of another.

If message number 123 is a reply, threading to its parent lets you see the message that 123 was a reply to. You can keep threading up to the original message that started it all, if it's still online.

Changing the Topic of a Reply

You can change the topic of a reply, but by doing this you'll lose the "thread" of the conversation. Then other users won't be able to find your message when they're threading through the other messages on the original topic.

If you reply to a message and change the topic, the Thread Forward and Thread Backward commands won't find your message, but the Thread Parent command will. You may want to do this to break off from the original conversation and start another one.

Forum Header

This is the very first message in a Forum. You can see the Forum header by typing "RSO" from the Forum menu. The header may contain lots of information on the Forum, including how long messages are kept, and the charges for using the Forum (if any).

Here's an example of a Forum header:

```
#1 FORUM HEADER: /Hello      Created 03-FEB-92 11:09
Forum-Op: Sysop
Forum Topic: Welcome to the EDB!
```

This is the /Hello Forum Header.

Sysop

#1 is the message number in this case. The Forum operator is the Sysop himself. The topic of the Forum appears at the Forum menu.

R = Read messages

There are many ways for you to read messages in a Forum. Actually, most of the features you'll find here are not for reading messages. They're for finding the messages you're interested in. Once you've read the message, there are many options for what to do with it, and what message to read next.

R = Read, S = Scan through messages, one at a time

During a scan, you get to look at message headers one at a time in chronological order (the order they were written in). You get the option to read the messages, download attached files, reply publicly, or reply privately.

You'll have these options for where to start your scanning:

RETURN or dot (.)	Start with the next message you haven't read yet
F	Start with the first message in the Forum (the Forum header)
L	Start with the very latest message in the Forum
<message number>	Start with a specific message number

The Default or Next Message

You'll probably be calling into the EDB regularly to see "what's new" in the Forums. The EDB tries to keep track of where you left off when you last read messages in a

Forum. But it doesn't keep track of exactly which messages you've read. It just remembers the highest numbered message. When you come back, you pick up after that one. This is the default or next message that you get by just hitting RETURN when asked for a starting message number.

So, in a Forum, the default or next message is the message right after the highest numbered message that you've already read.

You need to read the message (see the body of it) for this to count. Except that reading while threading forward or backward doesn't count.

R = Read, L = List messages out, nonstop

If you want messages to just scroll by on your screen without stopping to reply or download any files, then listing could be handy. You could also capture all messages and read them offline this way. Later you could call back to download specific files or reply to specific messages.

There are three types of listings depending on how much you want to see:

- ▶ Brief one-liner descriptions of the message
- ▶ Titles, or message headers, 4-6 lines long
- ▶ Full messages, with header and body

In all of these cases you can specify the starting point like you do in a scan and the listing goes from there forward, to the end of the Forum.

RETURN or (.)	Next or default message
F	First message
L	Last message
<message number>	Any specific message in the Forum

R = Read, K = Keyword search

Keyword searching is just like scanning except that you'll only see messages that contain some special words or phrases you're looking for.

<u>Keyword</u>	<u>Example matches</u>
demo	Demonstration pandemonium demolition
-demo-	demo "DEMO"
red day	By Monday, I was tired of waiting
red-letter-day	Thursday was a red letter day

As you can see, a hyphen has a special purpose in keywords:

A word with hyphens around it will specify an exact match on the entire word.

A hyphen will match a space, a line boundary, any punctuation symbol, or any combination of these.

Read Commands

You can answer several questions at once by typing them all on the same line. All of these read commands work from the Forum menu:

RSF	Scan from the first message
RS.	Scan starting from the next new message
RS38501	Scan from message number 38501
RSL	Scan from the last message
RLBF	List brief titles of all messages
RLTF	List 4-line titles of all messages
RLFF	List all messages fully
RLB.	List brief titles starting with the new messages
RLT.	List 4-line titles starting with the new messages
RLF.	List full messages starting with the new messages

After Reading a Message

After you read a message in a Forum, you'll get a prompt like this:

(R)eply, (E)mail reply, follow (T)hread, (P)revious or (N)ext message?

(R)eply in this Forum

If you reply, the author of the original message will see your reply in his electronic mail, assuming his E-mail preferences are set accordingly. Other users who read this Forum will also see your reply as part of a thread.

(E)mail (private) reply

You can reply privately to the author of a message in a Forum using the (E)mail reply option. The author will see your message in his electronic mail. No other user will be able to see it.

Follow (T)hread

A thread is a bunch of messages on the same topic. The messages are formed into a tree by replying and re-replying. You can move through the thread in these ways:

Thread (F)orward, (B)ackward, or to (P)arent (? for help):

The thread options can be combined into character pairs: Rather than typing T RETURN P RETURN, you can type TP RETURN (using concatenated commands).

TB (T)hread (B)ackward skip back to earlier messages on the same topic, in chronological order

TF (T)hread (F)orward skip forward to newer messages on the same topic, in chronological order

TP (T)hread to (P)arent jump back to the "parent" of this message -- the one it was a reply to

You can continue to type TF RETURN TF RETURN to move through the thread, etc.

All this threading is a digression: you'll resume your original scan from where you left off when you choose the (N)ext or (P)revious message.

(P)revious or (N)ext message

Skip chronologically through the messages in the Forum. You'll often use P RETURN P RETURN P RETURN ... to zoom backward in time, or N RETURN N RETURN N RETURN ... to zoom forward. You can also type NNNN RETURN to leap over four messages at once -- seeing all their headers as you do.

F = Filescan -- look only for messages with files attached

The Filescan option from the Forum menu operates exactly like the read option with one important difference: only messages with files attached are scanned. Everything else in the above description of reading messages also applies to file scanning.

Q = Quickscan multiple Forums

Here's another powerful variation on reading messages. You can specify your own preferences for some of the Forums, and even the kind of information you'd like to see in those Forums.

That way you're saved the trouble of switching to several different Forums each time you log on, or of wading through reams of messages that you're not interested in.

Configuring Your Quickscan

The first step is to configure your quickscan by answering these questions:

- ▶ Which Forums are you interested in?
- ▶ Do you want to narrow the scan down to messages with certain keywords?

Here's an example of some keywords and possible matches:

<u>Keyword</u>	<u>Example of a match</u>
COMP COMMUNIC	computer communications, company must communicate
MODEM COMMUNIC	modem communicating
PACKET SWITCH	packet switching networks, packet of switches

Keyword Phrases

The search will look for messages that match any of the above 3 keyword phrases, but the match must be complete on all of the words in a keyword phrase.

In more technical terms, the search is looking for a message with:

COMP and COMMUNIC
or
MODEM and COMMUNIC
or
PACKET and SWITCH

Which Forums

When deciding which Forums to include in your Quickscan, here are some things you might type:

V	View the Forums now included in your quickscan
-<forum name>	Remove a Forum from quickscan
+ <forum name>	Add a Forum to quickscan
-<forum > + <forum >	Reset scanning in a Forum to the beginning
-ALL	Remove all Forums from your quickscan
+ALL	Add all Forums to your quickscan

All new Forums will automatically get added to your quickscan. If you aren't interested in them, you can remove them any time.

Starting your Quickscan Pointers From Scratch

If you want your quickscan to review a Forum from the beginning, you need to reset your pointers for that Forum, because quickscan tries to give you only "new" messages. To do this, just remove and then add the Forum:

Enter K, V, + or -, or ? for more info: -/ANTON + /ANTON

Now your next quickscan will start the "/Anton" Forum from the first message. This might be particularly handy if you've changed your quickscan keywords, and want to review what you might have missed.

W = Write a message

In a Forum, you can write your message to **** ALL **** users, or to a specific user. When you write to a specific user, the message may appear in his electronic mail "in-box".

After making the choice of who your message is to, you can begin writing your message. If your terminal has ANSI capability, you enter the full screen editor. You can type your message a line at a time, move the cursor around with the arrow keys, delete lines with CTRL-Y, and so on. CTRL-S saves your message and exits the full screen editor.

If your terminal doesn't have ANSI capability, you enter the Line Editor. Just type one line at a time here. The editor will automatically wrap lines as you run into the right margin. When done, type "OK" on a single line to save your message and possibly edit it a little more.

After writing a message to a Forum

After you write a message, you get the option of uploading a file and attaching it to the message (assuming you have access).

Do you wish to "attach" a file to this message (Y/N)?

Be careful to complete this step or your message will get lost. For example, if you type 'X' to exit instead of yes or no, you'll lose the message.

T = Teleconference

Every Forum has its own teleconference channel. The topic of the channel is the topic of the Forum (from the Forum header). See more on the teleconference in the "Teleconferencing" section.

/RECENT Global Command

Type /RECENT at any prompt to see a list of the most recent users to logoff the system.

5.2.2.4 Library of Files

The Library of files is for putting large file areas online for uploading and downloading.

LIBs - Library Information Banks

Files are organized into LIBs. A LIB is like a single DOS directory of files. Type S? from the Library menu to get a list of LIBs. You can select a LIB with the S command and get a list of its files with the F command.

File Names

Files can be named just like DOS files, with 1 to 8 characters, a dot, and 0 to 3 characters:

FILENAME.EXT

File names can include letters (converted to upper case), numbers, and these punctuation symbols:

! # \$ % & ' () - @ ^ _ ' .

You can refer to a file that's not in the current LIB by adding the LIB name and a backward slash (\) on the beginning:

LIBNAME\FILENAME.EXT

All the files within a LIB have to have a unique name.

The Current LIB

You always have a current or default LIB. When you first log on, you're in the MAIN LIB. Use the S <lib name> command to select a different LIB. The Library menu prompt shows you what LIB you're in:

**Current LIB: MAIN The Main LIB
Select a letter from the above list (or X to exit):**

Finding a File Fast

If you know the name of the file you want to download:

**S MAIN
D <file name>**

Select the MAIN LIB and start a download keyword search for the name of the file. If the file is in the MAIN LIB you'll get it right away. If it's in another LIB and you see it listed alphabetically, you can pick it by number. If there are many files with the same name in different LIBs, you can scan (F)orward and (B)ackward until you find it and pick it by number.

If you know the name of the file, and the LIB it's in:

D <lib name>\<file name>

Example: D UTILITY\BIGSORT.EXE

Just stick the LIB name in front of the file name with a backslash (\) in between. You can use this command from any LIB.

If you know a piece of the file name or description:

S MAIN
F <piece of info>
D <file name>

The F <piece of info> command will search for the piece of information in the MAINFILES. file. Examples: you can see all files with an .EXE extension by typing F .EXE; or all files with the word "doctor" in their short description by typing F DOCTOR. Once you know the name of the file, use it in the D command.

If you know when the file was uploaded:

D <date>
D -<days ago>

Examples: D 4/15
D 12/25/91
D -7
D -14

You'll get a numbered list of files in order by when they were uploaded. You can scan (F)orward or (B)ackward through the chronological listing and pick a file by number.

If you know something about the subject of the file:

S MAIN
D <keyword>

In the MAIN LIB you can search the entire Library for a file. Just refer to it by keyword, and get a numbered list of files with that keyword. If you don't get an exact match, scan (F)orward or (B)ackward through the alphabetical listing.

Command Summary

F	File directory for this LIB
F <string>	File search (searches through names and descriptions)
D <filename>	Display details on a file, with download options

D <file> <protocol>	Download a file
D <file> <file> ...	Download several files (you can use wildcards too)
D <keyword>	Keyword scan (alphabetized)
D -0	Scan today's uploads
D -1	Scan yesterday's uploads (-7 for this week, etc.)
D -LAST	Scan uploads from the day you were last online
D <date>	Scan uploads from a specific date
D <lib>\<filename>	Download a file that's in a different LIB
U <filename>	Upload a file
U * <protocol>	Upload multiple files
M <filename>	Modify the descriptions of a file you uploaded
T	Menu of options for files you have tagged
T?	List of tagged files with options
T <protocol>	Download all tagged files now
T -ALL	Untag all tagged files
S <libname>	Select a LIB, display some details on it
S?	Get a list of LIBs
S.	Get a complete description of your current LIB

The MAIN LIB

The MAIN LIB can have its own files just like any other LIB. But while you're in the MAIN LIB, the download and file list commands apply to all files in all the LIBs. If you're not sure which LIB a file is in, the MAIN LIB is the place to look.

F = File Listing

Enter F from any LIB to get a list of the files in the LIB. The F command just displays the text file in each LIB named "FILES.". So these commands do almost the same thing:

F	File listing (no download charges)
D FILES L	File listing (download charges apply)
F =	Find String

This command searches through the FILES. file in the current LIB for a certain string.

F SYSOP	Look at all files uploaded by Sysop
F " SYSOP "	Same, but exclude those uploaded by CoSysop
F .EXE	Look for all .EXE files
F " 4000 "	Look for all files that are 4000 bytes long
F DOS	Look for all files that have something to do with DOS

Only lines in the FILES. file that have the string you're looking for will be displayed. The matching strings will be highlighted in a different color (if you have ANSI support). (This search is case-insensitive.)

Tagging Files for Download

When you choose a file to download, you will be given a list of protocols to use for the download. You can "tag" a file to download later using the T protocol. When you have tagged all the files you wish to download, you can download them all at once. You can select the T option to download all your tagged files (or to remove some of them if you changed your mind). You will also be given the option of downloading all your tagged files when you log off the system.

Multi-File Download

You can specify several files to download at once:

```
D *.EXE *.COM *.BAT READ.ME
```

When you do this, you are tagging these file specifications. Right away you get the chance to download them all with a multi-file protocol, or you may download them all later.

You can download multiple files from a different LIB by prefixing the file specification with the LIB name, as in:

```
D OTHLIB\*.TXT OTHLIB\READ.ME K
```

This starts a Kermit download of all .TXT files and the READ.ME file from the "OTHLIB" LIB.

U = Upload a file

There are four steps to uploading a file:

1. Name the file
2. Type in a short description for it (up to 40 characters)
3. Transfer the file
4. Modify the file, entering a long description and keywords

Take a moment to choose a good description for the file. This description will appear in the FILES. listing and in the keyword and chronological searches. (And the F <string> command will find your file if the <string> is in your description somewhere.)

Multi-File Upload

You can upload several files at once using one of the batch file protocols by typing * instead of a file name. Here are the multi-file upload protocol choices:

Current LIB: MAIN The Main LIB

Select a Library option (F,D,U,M,S,T,X, or ? for help): U *

To start uploading these files, type:

B ... YMODEM Batch Z ... ZMODEM
G ... YMODEM-g K ... Kermit

Your choice (or 'X' to exit):

In these cases, you don't need to tell the EDB the name of the file. The same file name will be used on the EDB as is used on your computer. That's possible because these protocols transmit the name of the file, as well as its exact size, time, and date, before the contents are transmitted.

You can use "U *" even when uploading only one file. That way you don't have to type in the file name twice.

Please be sure and M = Modify the files you upload using U * right after you upload them. Otherwise they'll have blank short descriptions. That means that in the F = file listing and in the keyword search they'll show up with only the file name.

Upload approval

In some LIBs your uploaded file may not be available for other users to download until the Sysop or LIB Operator approves the file. LIB Operators are notified of unapproved files in their LIBs when they log on. Usually, you can see who is the primary LIB Operator when you select a LIB.

M = Modify an uploaded file

If your terminal has ANSI capability, modifying a file gives you a full screen view of the file information. You can move around with the arrow keys. To change anything, just point to it and type it.

Modifying a file means typing in this information:

Short file description (up to 40 characters)
Long file description (up to 5 lines of 79 characters each)
Keywords (up to 10 keywords of 16 characters each)

When you modify a brand new file, the long description starts off as blank. A message will appear where you're supposed to type in a long description:

<please type in a longer description here, up to 5 lines>

Just point the cursor to this field and type in the description. This message will disappear right away.

You'll see a similar message where you can type in keywords:

<keywords here>

You can modify the information for files you've uploaded to change their descriptions or keywords.

Other information about the file appears here, but you can't change it, like size, time, date, and who uploaded the file.

The long description can be up to 5 lines of 79 characters each. If you're not using all 5 lines, just hit RETURN after the last line.

You can give a file up to 10 keywords so that it will show up in download keyword searches, and in the INDEX file.

When you're done modifying the file's descriptions and keywords, move the cursor to the bottom and choose:

- SAVE** Save your new descriptions and keywords
- QUIT** Throw out your changes and restore the old descriptions and keywords
- RE-UPLOAD** Save the descriptions and then upload new contents for the file
- DELETE** Delete the file

To choose one of these type in the first letter (S, Q, R, D) and hit RETURN. Or tap the spacebar until the one you want comes up and then hit RETURN.

You can also get out of the modify screen quickly by using these keystrokes:

- <CTRL-S>** Save your new descriptions and keywords
- <CTRL-Q>** Throw out your changes and restore the old descriptions and keywords

Modifying a File when you don't have ANSI

If your terminal doesn't have ANSI, you can still modify the descriptions and keywords of a file one field at a time. Hit RETURN to skip over a field and move down to the next field.

When you're pointing to a field, you can back up over the information that's already there and type new information, or just start typing in the new information.

To edit the information that's there, start with a <Backspace>.

To replace the information that's there, start by typing the first character of the new information.

If you make a mistake, just use:

<CTRL-U> to back up one field.

Choosing Keywords

Keywords are attached to files in the Library so that the file can be referenced by subject, using the **D <keyword>** command.

After you upload a file, it's a good idea to modify it and give it some useful keywords. Keywords should be short and simple. Don't use abbreviations, synonyms or suffixes if you can help it. Avoid keywords that are too general, as well as those that are too specific. To follow the terminology that's already in use on the EDB, try scanning with the **D <keyword>** command.

If you must use a multiple-word keyword use the comma so that the more important word comes first, for example: "america,north" or "compound, organic". Use multiple-word keywords only when:

- ▶ There exists no single word that identifies the concept.
- ▶ The subordinate word is meaningless without the main word, but the main word is too broad without its subordinates.
- ▶ The single word is used often. Use another word to control the sequence and group the files better.

Keywords can be 1 to 16 letters (converted to lower case), numbers, or any of the punctuation symbols comma (,) dash (-) and apostrophe (').

The file name is automatically a keyword, so there's no need to make up keywords that are similar to the file name. This will just hog space in the alphabetized sequence. Take a second and put yourself at the keyboard of someone who wants this file. What keywords are they likely to think of?

There's usually no need to think up a lot of keywords. Maybe the file name and one or two good choices are all that users will need to find your file.

S = Select a LIB

When you're in the Library of Files, you are always in the current LIB. The Library menu tells you the name and description of the current LIB. Use the **S** command to select a different LIB. After selecting the **S** command, you can select **?** to view a list of all available LIBs (just **S?** from the main Library menu to just get a list). When you select a new LIB, you get a little more information about the LIB.

DOS-Only LIBs

These are no-frills LIBs. Files in a DOS-only LIB have no descriptions or keywords. Only the information that DOS records about a file is available -- name, size, date, and time.

File Listings in DOS-Only LIBs

The F command gives you a list of files, but they probably look more like a DOS listing.

```
Current LIB: FASTLIB This will be a DOS-Only LIB
Select a Library option (F,D,U,M,S,X, or ? for help): F
```

```
SUMMARY.DAT  46199  04/30/92  15:03
SCHOOLS.DAT  184643 04/29/92  13:15
BUSINESS.DAT 98482  04/29/92  14:22
GOVERNMT.DAT 285820 04/30/92  18:25
HOUSHOLD.DAT 398582 04/30/92  19:43
```

```
5 File(s)
1013726 total bytes in these files
37298176 bytes free on this disk
```

```
Current LIB: FASTLIB This will be a DOS-Only LIB
Select a Library option (F,D,U,M,S,X, or ? for help):
```

On some systems, a custom text file named FILES may be maintained by the Sysop in a DOS-only LIB, and you'll get that when you use the F command.

5.2.2.5 Polls and Questionnaires

The Sysop of the EDB can prepare up to 10 custom questionnaires. This is where the EDB asks you a series of questions and records your answers on disk for the Sysop. The Sysop can statistically analyze the answers from all users. In each questionnaire, the EDB can present you with up to 20 questions.

You may answer any questionnaire as many times as you like -- only your last set of answers will actually count toward the results.

When you answer questions, they aren't processed right away -- they're just saved to disk. The Sysop has the option of running a report on them from time to time, and formatting the results for online viewing.

5.2.2.6 Registry of Users

The registry allows you to put information online for other users to view. This is optional. You may want to remain confidential or anonymous on the EDB and there's usually no penalty for doing so. By the way, the questions you answered when you signed up are for the Sysop only. See him or her if you have any confidentiality concerns.

When you create your own entry in the registry, you type in the answers to several questions. The operator of the EDB can configure his own set of questions. The last one is always a "summary" question. If you don't want to answer a question, you can always enter "N/A".

You can scan a list of users alphabetized by User-ID, and see their summary lines. Also, you can look up other users directly by User-ID. Of course, you'll only see information on users who have voluntarily answered the registry questions.

D - Directory Search

Use this command to list out the users that have answered the registry questions. You may start anywhere in the alphabet you please, and only the User-ID and summary line will appear for each user.

L - Looking up Another User

This is used to look up a specific user's registry. You will be able to view the user's answers to all registry questions. If you don't know the exact User-ID you want to look up, just enter what you know, and the EDB will try to find an exact match for you.

Y - Creating or Editing Your Entry

When you create your entry, you answer the registry questions one after the other. Each answer has a limited number of characters it can accept. To find out how many, you can just type a long line until you run into the limit.

After creating your entry, you can go back later and edit your answers.

5.2.2.7 User Account Display/Edit

This service allows you to:

- ▶ View some statistics on your account
- ▶ Edit many of the answers you gave when you first signed up

S = Display Statistics on your Account

This choice shows you a few statistics on your account.

User-ID: Arthur Berg

S => Display statistics on your account

A => Display or edit account information (address/phone/password)

Your choice (or 'X' to exit): S

User-ID Arthur Berg
Account Created 02/09/91
Last Logon 05/14/92
Account Class..... CUSTOMER
Time Limit Per Call..... 60 MIN
Time Limit Per Day..... 60 MIN
ANSI setting this session .. ON

User-ID: Arthur Berg

S => Display statistics on your account

A => Display or edit account information (address/phone/password)

Your choice (or 'X' to exit):

Your account was created when you first signed up. The day you last logged on, (prior to your current session) is recorded also.

Your class determines how long you can stay online and what services you are allowed to use, and on some systems, whether you are charged for using the EDB or not. In the above example, Arthur has no limits on how long he can stay online. The ANSI-ON condition means that his terminal is receiving color and cursor movement commands from the EDB. You can change your ANSI setting if you like. More on that below.

A = Editing Your Account Information

On most EDBs, you can edit your answers to the sign-up questions. You won't be able to change your User-ID, though. And some custom questions are only asked at sign-up, and can't be changed later.

The Full Screen Data Entry service is used to change your account information if your terminal has ANSI capability. You'll see all your account information on screen. Use your up and down arrows keys to move around to different fields. To retype a field, just type over the old information. To change a field, start by moving the cursor right or left to the correct position. Then type over the old stuff, or:

** or <Backspace>** delete a character
<CTRL-F> insert a character

See below for editing your account information when you don't have ANSI (using the Linear Data Entry service).

You can leave this screen any time by hitting one of these keystrokes:

<CTRL-G> Save your changes and exit
<CTRL-O> Quit and abandon your changes

Name, Address, Phone Numbers

On some of these fields there are certain minimum lengths required. You'll be notified if your answer is too short. This information is treated by most Sysops as highly confidential. It would be used mainly to contact you in the event of a question or problem with your account. Many Sysops also use this information to mail announcements, newsletters, etc.

Computer System

On some systems, different menus are provided for users that have IBM computers and users that don't. IBM computers as terminals can display a wide variety of special extended ASCII characters, including box borders, shading, international characters, etc. The only other impact of this question is on demographic statistics that the Sysop can see.

ANSI Preference

This answer concerns whether or not your terminal should be receiving ANSI commands for cursor positioning, colors, and other attributes.

ON ANSI commands will be sent to your terminal

OFF ANSI commands will not be sent to your terminal

AUTO Each time you log on, the EDB will decide whether or not to send ANSI commands to your terminal. The EDB may automatically detect whether you have ANSI or not, or it may ask you, or it may be prewired by the Sysop to be on or off.

Usually you can leave it set to AUTO. But if this appears to be making the wrong choice sometimes, you can change it. If you see bland colorless text on your color monitor, set it to ON. If you see lots of annoying bracket characters with numbers and letters after them, like "[33m" or "[0;1;47;52m", you may want to set it to OFF.

Screen Dimensions and Pausing

Here are some examples of different screen configurations:

Screen size: 80 columns by 24 lines

Pause output? PAUSE

Standard 80x24 terminal, the EDB pauses when it has 23 or more lines to display

Screen size: 80 columns by 24 lines

Pause output? CONTINUOUS

Standard 80x24 terminal, the EDB doesn't pause, display is continuous

Screen size: 80 columns by 43 lines

Pause output? PAUSE

Enlarged 80x43 terminal, pause each 41 lines

Default Editor

This answer helps to determine if you should be placed in the Full Screen Editor or the Line Editor when the system needs to invoke a system text editor. The choices are FSE or LINE.

Password

Your password appears as a string of asterisks (****). You can retype your password once in a while to keep your account secure.

Save or Quit

When you're done editing, you can answer the question at the bottom:

SAVE Save your changes and exit

QUIT Quit and abandon your changes

Just pick S or Q and hit RETURN to exit the service back to the User Account Display/Edit menu.

Editing your Account when you don't have ANSI

If your terminal doesn't have ANSI capability or if your screen isn't long enough (24 lines is enough), then editing your account information will have to proceed one question at a time.

Use the RETURN key to skip each field you don't want to change. When you get to a field you want to change, you can back up over the information that's already there and type new information, or just start typing in completely new information.

To edit the information that's there, start with a <Backspace>.

To replace the information that's there, start by typing the first character of the new information.

If you make a mistake, just use:

<Ctrl-U> to back up one field.

5.2.2.8 Search and Retrieve

Search and Retrieve is an online text file database manager for The Major EDB. It allows you to search "Categories" of ASCII text files. When a match is found, you are placed into the Full Screen Reader (FSR). Upon entering FSR, the found text is highlighted on the screen for easy identification. At this point you can scroll up and down through the file, search for the target string again, abort current file and continue searching in the next file in the Category, change the search string, or even download the file. If you only wish to view a file in a Category, you can simply use the FSR as a file viewer.

Using Search and Retrieve

Upon selecting Search and Retrieve from the main menu, you will see the following menu:

The following Search and Retrieve services are available:

- C => Choose a search category
- S => Search files in current category
- L => List files in current category
- V => View a file in current category
- X => Exit

Current category is: S&R_INFO

Select a letter from the above list (or 'X' to exit): _

'C' - Prompts the user to select a Category or '?' for a list.

'S' - The user will be prompted for a string to search for. Search and Retrieve will start searching through all the files in the currently selected Category. If no matches are found, Search and Retrieve will return back to the main menu. If a match is found, the user will be put into FSR where they can do various operations like scrolling up or down, downloading, etc..

- 'L' - Choose this if you simply need a list of the files in the currently selected Category.
- 'V' - Choose this if you already know the file you wish to view. You will automatically be put into FSR where you can read the selected file. You may even initiate a search at this point if you wish.
- 'X' - Choose this if you wish to exit out of Search and Retrieve.

Using the Full Screen Reader

Once you are in FSR (either through a successful search or a direct command to read), you can do various operations on the selected file:

- 'U' - Scroll up through the selected file.
- 'D' - Scroll down through the selected file.
- 'F' - Download the selected file.
- 'C' - Change search string, (or enter one if a search string was not previously selected).
- 'X' - Exit out of FSR.
- 'S' - Search for the search string again.
- 'N' - Quit the current file and continue searching in the next file in the selected Category.

6.0 PRESENT STATUS AND EXPANSION PLANS

The database became available to the members of the EMP during the month of November, 1994. At this time, energy data for four transit authorities have been added to the database. These data are located at the RSC.

The database is expected to expand in several areas. These areas are:

1. New Transit Authority Information
2. Transit Authority Information Updating
3. E-Mail and Forum Activity
4. Other Categories
5. Additional Capabilities

6.1 New Transit Authority Information

As new transit authorities become members of the EMP, information will be added to the database similar to that already present for current members. Places have already been reserved for these authorities.

6.2 Transit Authority Information Updating

The transit authorities who are members of the EMP will update time sensitive information as it becomes available.

6.3 E-Mail and Forum Activity

As the EDB grows, both E-mail and Forum activity are expected to increase. This media should provide an excellent exchange place for up to date energy cost reduction ideas and results.

6.4 Other Categories

Other categories which may be added as more members join are

- ▶ Electrical equipment supply, cost and cost history
- ▶ Other energy management computer tool descriptions
- ▶ Energy management equipment

6.5 Additional Capabilities

Additional capabilities could be added to the database as it expands.

Through a doorway program, the EDB user could run programs on a second computer which is attached to the present EDB computer. This would allow lotus files to be read and other programs and software to be accessed by the user.

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HB 4451 .U34 1995a
Uher, Richard A.
The rail transit energy
management program

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