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**MSTRACK -- A computerized tracking system for manuscripts  
written in Paradox for the IBM pc and compatibles**

by

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## Introduction

MSTRACK is a computerized tracking system for manuscripts written by members of the Branch of Geochemistry. Members of the Technical Publications Support Group in the Branch of Geochemistry are the primary users of this system. They use MSTRACK to record the movement of a manuscript through the review and publication process. MSTRACK operates on a personal computer running DOS and requires PARADOX 3.0 or later.

The database is in two parts: (1) an active database consisting of manuscripts currently being routed through the review and publication process, and (2) an archival database consisting of manuscripts that have been published or are no longer active. The archival system is kept to be used for Branch bibliographies.

To operate the manuscript tracking system, the user must change working directory into the directory that contains the database and type MSTRACK. This invokes a DOS BAT file which, in turn, invokes PARADOX with the proper script files.

The source code for the MSTRACK system is included as Report 91-443-B on floppy disk. The disk contains MSTRACK.BAT (batch file to invoke Paradox with correct script files), MENUMS1.SC (displays main menu), and TRKLIB.SC (contains source code for all procedures used and creates TRACKLB.LIB when PLAYED in Paradox).

Hard copies of the table structures are found in Appendix A. Hard copies of the Forms are found in Appendix B. Hard copies of the Reports are found in Appendix C.

## User Documentation

When the user types MSTRACK, the main menu is displayed as follows:

**Entry:** Initial Entry of manuscript into database  
**Query:** List information about manuscripts  
**Update:** Update location of manuscript, by BG number  
**Review:** Reviewer manipulation  
**Edit:** Edit information about a manuscript, not location  
**Delete:** Deletes manuscript specified by BG number from database  
**Maint:** Diary, histogram, reset, and unload functions  
**Bib:** Enter complete bibliographic reference  
**Arch:** Query the archival database  
**Move:** Move manuscript from ACTIVE database to ARCHIVAL  
**Leave:** Leave the application

All prompts for the BG (Branch of Geochemistry) number throughout the tracking system have the following format: "SUBMENU LOCATION: Enter BG number:" (example: "LOCATION UPDATE: Enter BG number: "). This is done so that the user can always tell in which sub-system they are working. The BG number should always be entered in the form FY-999 (example 1-012). Pressing the ENTER key at this prompt returns the user to the menu.

Every action that changes the database is recorded in a "diary file" named DIARYMS. The diary file is an ASCII file that is a chronological log of activity in the database. The entry made in DIARYMS has the date that the actual changes were made to the database, not the date that was entered into the database.

## DESCRIPTION OF MAIN MENU OPTIONS

### ENTRY

This procedure is used to enter the manuscript into the tracking system. The 'entry' form is displayed and the user fills in everything except the BG number. The procedure computes the next BG number to be used and assigns it to the manuscript. The BG number is a seven-digit number; a three-character prefix, a hyphen, and a three-digit number with leading zeroes. The prefix (including the year digit) can be changed in the maintenance section. Authors should be entered with the last name first. Use upper- and lower-case letters for the authors and title. Valid entries for PROGRAM and TYPE of manuscript can be accessed during the entry process by pressing F1 when prompted to do so. The PROJECT number must follow the following pattern: ####-#####-##. A notation is made in the diary file, DIARYMS, that states "entered into system--to review committee". If DIARYMS does not exist, it is created the first time it is needed.

### QUERY/ARCH

These two menu items have the same format, so they are discussed together. The QUERY selection is for active manuscripts; the ARCH selection is for archival manuscripts. The menu for each of these options has the following choices:

<b>BG number:</b>	Find manuscript(s) by BG number
<b>Rpt number:</b>	Find manuscript(s) by report number
<b>Author:</b>	Find manuscript(s) by author name
<b>Project:</b>	Find manuscript(s) by project number
<b>Program:</b>	Find manuscript(s) by program
<b>Type:</b>	Find manuscript(s) by type of manuscript
<b>CTR:</b>	List all manuscripts to CTR in given timeframe
<b>List all:</b>	List all manuscripts in database
<b>Return:</b>	Return to previous menu level

When a query is performed the results are displayed on the screen. The BG number and Rpt number queries return only one manuscript as a result. The other queries may return more than one manuscript. If so, the user can scroll through the manuscripts by using the down arrow key. Long fields can be examined by pressing ALT F5. A report can be printed by pressing F7. The printed report does not have the same format as the form on the screen; it is compressed to put multiple manuscripts on one page. F2 should be pressed when the user is finished viewing the results. The results from the BG number and report number queries can be printed by simply pressing the Print Screen key on the PC.

#### **BG number**

This option allows the user to display a specific manuscript in the database. The user is prompted for the desired BG

number. The user needs to enter the year digit, hyphen, and three digit number, (not the 'BG'). The result of this query is displayed on the screen in the 'routing sheet' format.

### **Rpt number**

This option allows the user to display a specific manuscript, if it has been assigned an official report number. The user is prompted for the report number. The user needs to enter the entire report number, including prefix. The result of this query is displayed on the screen in the 'routing sheet' format.

### **Author**

This option allows the user to retrieve all manuscripts by surname of the author or coauthor. There is a submenu asking which author(s) to retrieve.

<b>Primary author:</b>	Only main author
<b>Additional authors:</b>	Only search secondary authors
<b>Either:</b>	Either main or secondary author
<b>Return:</b>	Return to previous menu level

The user can scroll through the manuscripts that meet the criteria by using the down arrow key. Long fields can be examined by pressing ALT F5. A report can be printed by pressing F7. The printed report does not have the same format as the form on the screen; it is compressed to put multiple manuscripts on one page. F2 should be pressed when the user is finished viewing the results.

### **Project**

This option allows the user to retrieve all manuscripts having a specific project number. The user can scroll through the manuscripts that meet the criteria by using the down arrow key. Long fields can be examined by pressing ALT F5. A report can be printed by pressing F7. The printed report does not have the same format as the form on the screen; it is compressed to put multiple manuscripts on one page. F2 should be pressed when the user is finished viewing the results.

The tracking system is set up so that new manuscripts have to be entered with a project number in this pattern: #####-#####-## All the project numbers from the original system on the Data General computer (DG) have the pattern #####-#####. The query retrieves manuscripts using either pattern. If the nine-digit number is given, all projects with those nine digits will be retrieved, regardless of the last two digits, if any.

### **Program**

This option allows the user to retrieve all manuscripts with a

specific program code. The user can scroll through the manuscripts that meet the criteria by using the down arrow key. Long fields can be examined by pressing ALT F5. A report can be printed by pressing F7. The printed report does not have the same format as the form on the screen; it is compressed to put multiple manuscripts on one page. F2 should be pressed when the user is finished viewing the results.

### **Type**

This option allows the user to retrieve manuscripts that are a specific type of report. The user can scroll through the manuscripts that meet the criteria by using the down arrow key. Long fields can be examined by pressing ALT F5. A report can be printed by pressing F7. The printed report does not have the same format as the form on the screen; it is compressed to put multiple manuscripts on one page. F2 should be pressed when the user is finished viewing the results.

### **CTR**

This option allows the user to retrieve all manuscripts that were sent "TO CTR" in a specific timeframe. The user enters a minimum and maximum date. Those dates are included in the query. The user can scroll through the manuscripts that meet the criteria by using the down arrow key. Long fields can be examined by pressing ALT F5. A report can be printed by pressing F7. The printed report does not have the same format as the form on the screen; it is compressed to put multiple manuscripts on one page and is grouped by program code. F2 should be pressed when the user is finished viewing the results.

### **List all**

This option retrieves all manuscripts in the database and lists them on the screen in table form. All fields are not visible at one time; use the tab key or the right arrow to scroll across.

### **UPDATE**

This selection allows the user to record movement of a manuscript from one location to another. The 'routing sheet' form is used. F2 should be pressed when the user is finished entering dates to indicate the manuscript has changed locations. After F2 is pressed the procedure interrogates the database and makes diary entries to indicate location changes. If a user updates a manuscript to a location before the one that was current when they chose this option, there will be no diary entry to reflect that activity. When a manuscript is returned with Director's Approval, the routine checks to see if the manuscript is an Open File. If it is, a prompt is issued for the report number. The 'routing sheet' form currently has the following format:

To From

Review Commitee  
Reviewers (all)  
TPSG  
Geologic Names Unit  
Associate Branch Chief  
CTR/Director's Approval  
CTR (repro)  
Ozalid Room  
Clerical (copying)  
CTR (OFSS)  
Bibliography

## REVIEW

This selection allows the user to perform all actions associated with reviewers. When reviewers are assigned an entry is made in a separate table that records the reviewers name and the type of manuscript. This allows a user to see the number and types of manuscripts all reviewers have reviewed. The following menu is displayed:

**Assign reviewers:** Assign reviewers to manuscript  
**List reviewers:** List all reviewers for certain manuscript  
**Add reviewers:** Assign additional reviewer(s) to manuscript  
**Examine histogram:** Look at DB of reviewers  
**Return:** Return to previous menu level

### Assign reviewers

This selection allows the user to assign initial reviewers; reviewers cannot be added in this section. The procedure prompts for the BG no., then displays the author, title, and other information, and asks if this is the correct manuscript. If it is, the form for entry of reviewers names is displayed. The reviewer's name should be entered last name first. The reviewer's name is entered into the histogram or, if the reviewer's name already exists in the histogram, then just the code for the type of manuscript is added. The procedure will add to an existing entry only if the reviewer name already exists EXACTLY as entered. The table can hold 25 entries per reviewer name. This table can be purged and initialized in the MAINT section. An entry is made in the diary when reviewers are assigned.

### List reviewers

This selection will list the reviewers for any manuscript. The user is prompted for the manuscript number (BG no.) and the reviewers are listed to the screen.

### Add reviewers

This selection allows the user to add reviewers (one at a time) to a given manuscript. The same process that is used to

assign initial reviewers is used to add names to the histogram. An entry is made in the diary when a reviewer is added.

### **Examine histogram**

This selection allows the user to look at the histogram that contains the types of manuscripts each reviewer has reviewed. The histogram is set up to take 25 manuscripts per reviewer. This table should be reset at some interval (See MAINT section). The menu choices are:

<b>Whole histogram:</b>	Look at entire histogram
<b>Look at one reviewer:</b>	List only one reviewer
<b>Return:</b>	Return to previous menu level

### **EDIT**

This selection allows the user to alter information about any active manuscript. This has nothing to do with the location of the manuscript. The menu choices are:

<b>Author:</b>	Primary author
<b>AddAuthor:</b>	Additional authors
<b>Title:</b>	Title
<b>AddTitle:</b>	Additional title
<b>Type:</b>	Manuscript type
<b>Project:</b>	Project number
<b>Program:</b>	Program

A diary entry is made when information about the manuscript is edited.

### **DELETE**

This selection allows the user to delete a manuscript from the active database. It does not delete the reviewers from the histogram. An entry is made in the diary when a manuscript is deleted.

### **MAINT**

This selection contains maintenance features. The main menu has the following options:

<b>Diary:</b>	Sort and rename current diary
<b>Histogram:</b>	Sort and store current file and start new histogram
<b>Reset:</b>	Edit the prefix/year and set number for ms to 1
<b>Unload:</b>	Unload entire database to ASCII files
<b>Return:</b>	Return to previous menu level

## **DIARY**

The diary should periodically be cleared and the old file kept as a "history" file. The diary is an ASCII file named DIARYMS that is created and stored in the order that transactions are made (chronologically).

When the "Diary" selection is chosen the following actions take place:

- a. The diary file is sorted by the BG number; a file named DIARYBG is created.
- b. The original diary file (DIARYMS) is renamed with the current date as part of the name. The next time MSTRACK is executed, a new DIARYMS file will be created.
- c. A message is displayed stating the names of the files to be printed (if user desires). To print the diary files the user must leave the application and return to DOS to print the diary. The diary cannot be printed through Paradox (PAL manual, version 3.0, p. 347 & PC PowerTools p. 845) because it generates the error "Insufficient memory to return to Paradox".

## **HISTOGRAM**

Whenever the histogram table gets full or whenever otherwise desired the histogram table should be cleared and the old information stored as a "history" file. The histogram is stored as a Paradox data table. It is created and stored in the order that reviewer's names are entered.

When the "Histogram" selection is chosen the following actions take place:

- a. The HISTO table is sorted according to the last name of the reviewer. The original table is overwritten with the sorted table.
- b. A PARADOX report is created from the HISTO table and named FRQ with the current date appended to the name.
- c. The Paradox table HISTO is emptied of its records.
- d. A message is displayed stating how to print the histogram information. To print the histogram information, the user needs to exit to DOS and print the report file.

## **RESET**

At the beginning of each year (either fiscal or calendar, whichever system is being used), the four-character prefix used for the manuscript number (BG9-) needs to have the 'year' digit changed. The two letter code can also change, but the prefix must be exactly 4 digits. Also, the number sequencing is automatically reset to 1 when the prefix is changed.

## Programmer's Documentation

The lists below detail the components of the MSTRACK system.

### Paradox Tables:

BIB - General information about active manuscripts and locations  
REVIEW - Reviewers names and dates to/from--both active & archival  
JCTR - Dummy table used to copy reports and forms to CTR  
CTR - Created by renaming ANSWER after query  
BNUM - Contains next number to be used for manuscript number  
RNUM - Contains prefix to be used for manuscript number  
HISTO - Contains frequency distribution chart of reviewer names  
HIST2 - Used with HISTO  
REPORTS - Contains Acceptable codes for type of report  
PGMS - Contains acceptable codes for program  
ARCH - Contains "archival" manuscripts  
REF - Contains official bibliographic entries for manuscripts

### Miscellaneous files:

TRACKLB.LIB - created by TRKLIB, contains all procedures that make up the manuscript tracking system  
MSTRACK.BAT - DOS file that invokes PARADOX with MENUMS1  
DIARYMS - DOS file created first time needed; keeps record of activity in tracking system

### Paradox PAL code:

MENUMS1.SC is the driver module; it displays the main menu shown on page 2. This is invoked when the user types MSTRACK.

TRKLIB.SC is the script that creates the procedure library TRACKLB.LIB. Before the tracking system is started, Paradox has to be invoked and this script "PLAYED" to create TRACKLB.LIB. The following procedures are contained in TRKLIB.SC

ENTRYMS1 - Initial Entry of manuscript into system

QMENU1 - Menu for types of queries/retrievals possible--ACTIVE

QUBEG2 - Retrieval by BG number  
QUREPT1 - Retrieval by official report number  
QUAUTH2 - Retrieval by last name of author  
QUPROJ1 - Retrieval by project number  
QUPROG1 - Retrieval by program name  
QUTYPE1 - Retrieval by type of report  
QUCTR1 - Retrieval by date sent to CTR  
QUALL1 - Retrieval of all manuscripts in active database  
QARCH1 - Menu for types of queries/retrievals possible--ARCHIVAL  
QABEG2 - Retrieval by BG number

## UNLOAD

The other feature of the maintenance procedure is to unload the entire manuscript tracking system from Paradox into ASCII files that could be used to transfer the tracking data to another database management system. The UNLOAD selection creates ASCII files of all the Paradox tables that contain data. (There are several 'dummy' Paradox tables that are not included in the UNLOAD selection (JCTR and HIST2). They are used throughout the system for various reasons. These tables need to exist in Paradox for certain functions to take place properly, but in another DBMS, they may not be necessary.)

Table Name - - - - - > ASCII file created

Bib	BIB.ASC
Bnum	BNUM.ASC
Pgms	PGMS.ASC
Reports	REP.ASC
Review	REV.ASC
Rnum	RNO.ASC
Histo	HISTO.ASC
Arch	ARCH.ASC
Ref	REF.ASC

## BIB

This selection allows user to make a complete, official bibliographic entry for a manuscript, edit an existing bibliographic entry, or add the official report number. It does not allow this entry unless the manuscript is still active and has Director's approval. A manuscript cannot move to the archival database unless the bibliographic entry has been made.

## MOVE

This selection is used to move a manuscript from the active database to the archival database. The dates for Director's approval and bibliographic entry must exist.

QAREPT1 - Retrieval by official report number  
 QAUTH2 - Retrieval by last name of author  
 QAPROJ1 - Retrieval by project number  
 QAPROG1 - Retrieval by program name  
 QATYPE1 - Retrieval by type of report  
 QACTR1 - Retrieval by date sent to CTR  
 QAALL1 - Retrieval of all manuscripts in active database  
 UPDMS4 - Update location of a manuscript  
     FLDIN - Determines which locations were updated in  
 UPDMS4  
     LOOK - Contains actual locations paired with variable  
     names  
     RMENU1 - Menu for reviewer manipulation  
     RASIGN1 - Assign initial reviewer(s) for a manuscript  
     RLIST1 - Lists reviewers for a given manuscript  
     RADD1 - Add reviewer(s) for manuscript  
     RHIST1 - Look at 'type of reports reviewed' histogram  
 EDITMS1 - Edit information about a manuscript - not location  
 DELMS1 - Delete a manuscript from the database  
 MAINT1 - Maintenance functions, copy,sort,purge diary and  
           histogram; reset prefix, unload  
 MSREFR1 - to make the complete/official bibliographic entry  
 MOV2AR1 - to move the manuscript from the active database  
 (BIB)                      to the archival database (ARCH)

All prompts for the BG number throughout the tracking system have the following format: "SUBMENU LOCATION: Enter BG number:" (example: "LOCATION UPDATE: Enter BG number: ") This is done so that the user can always tell in which sub-system they are working. The BG number should always be entered in the form FY-999 (example 1-012). Pressing the ENTER key at this prompt returns the user to the menu.

Every action that changes the database is recorded in a "diary file" named DIARYMS. The diary file is an ASCII file that is a chronological log of activity in the database. The entry made in DIARYMS has the date that the actual changes were made to the database, not the date that was entered into the database.

**DESCRIPTION OF PROCEDURES**  
**Contained in TRKLIB.SC (TRACKLB.LIB)**

(Refer to the description of main menu options for user information)

**ENTRYMS1**

This procedure uses lookups from table BNUM (the prefix) and RNUM (last number used) and computes the next value for the numeric part of begno. Begno is a seven digit number; a three character prefix, a hyphen, and a three digit number with leading zeroes. A form is displayed and the user fills in everything except the BG number. A notation is made in the diary file DIARYMS that states "entered into system--to review committee" . If DIARYMS does not exist, it is created the first time it is referenced. Validity checks on the table BIB are used: (1) lookup tables for program (table PGMS) and type of manuscript (table REPORTS), (2) picture #####-####-## for PROJect number.

**QMENU1/QARCH1**

These two procedures are identical except for the tables they access, so they are discussed together. The Paradox QUERY command cannot accept variables for the table name, so two sections are required. QMENU1 and the QU procedures are for active manuscripts; QARCH1 and the QA procedures are for archival manuscripts. The main menu in each of these procedures has the following choices:

<b>BG number:</b>	Find manuscript(s) by BG number
<b>Rpt number:</b>	Find manuscript(s) by report number
<b>Author:</b>	Find manuscript(s) by author name
<b>Project:</b>	Find manuscript(s) by project number
<b>Program:</b>	Find manuscript(s) by program
<b>Type:</b>	Find manuscript(s) by type of manuscript
<b>CTR:</b>	List all manuscripts to CTR in given timeframe
<b>List all:</b>	List all manuscripts in database
<b>Return:</b>	Return to previous menu level

The results of the query are displayed on the screen. The BG number and Rpt number queries return only one manuscript. The other queries may return more than one manuscript. If so, the user can scroll through the manuscripts by using the down arrow key. This technique for viewing the results of a query seems to work with one keystroke only when all the fields except the last one on the Paradox form are "displayonly"; if they are regular fields, the down arrow has to be pressed to go through each field.

Long fields can be examined by pressing ALT F5. A report can be printed by pressing F7. The printed report does not have the same format as the form on the screen; it is compressed to put multiple manuscripts on one page. F2 should be pressed when the user is

finished viewing the results. The results from the BG number and report number queries can be printed by simply pressing the Print Screen key on the PC.

#### **QUBEG2/QABEG2**

This procedure allows the user to display a specific manuscript, in the appropriate database. The result of the query is displayed in the 'routing sheet' format. This routine does not use the QUERY command, but is placed in this section because it logically falls here.

#### **QUREPT1/QAREPT1**

This procedure allows the user to display a specific manuscript, in the appropriate database, that has been assigned an official report number. The result of this query is displayed in the 'routing sheet' format. This routine does not use the QUERY command, but is placed in this section because it logically falls here.

#### **QUAUTH2/QAAUTH2**

This procedure allows the user to retrieve all manuscripts in the appropriate database by surname of the author or co-author (last name only). The submenu has the following form:

<b>Primary author:</b>	Only main author
<b>Additional authors:</b>	Only search secondary authors
<b>Either:</b>	Either main or secondary author
<b>Return:</b>	Return to previous menu level

This information is listed to the screen one manuscript at a time. See information under QMENU1 above.

The technique used in Paradox to have forms and reports used by a table created during a query is explained in this paragraph. This technique is used in the author query, project query, program query, type query, and CTR query. The temporary ANSWER table is renamed to "CTR" so that it doesn't get overwritten inadvertently. The table "JCTR" has the exact same structure as the answer ("CTR") table. JCTR and its forms and reports exist so that the forms and reports may be copied to the table "CTR". Tables that get overwritten (like CTR does when ANSWER is renamed) get their forms and reports overwritten also. Since the ANSWER table doesn't have forms and reports, then the CTR table doesn't have forms and reports. That is why JCTR exists and its forms and reports are copied to CTR after the query is performed. The JCTR table and the table created by the query in any of the query modules QUAUTH2, QUPROG1, QUTYPE1, QUPROJ1, QUCTR1 must be exactly the same. That is why the JCTR table does not have a key item. To see the results of the query on the screen a

FORM must be used. To see the results of the query on the printer a REPORT must be used.

The Custom Configuration program MUST be executed before these retrievals are made. In Paradox, the default order of variables in a query is table order; the change needs to be made in the Paradox Configuration file so that variables are returned in image order.

#### **QUPROJ1/QAPROJ1**

This procedure allows the user to retrieve all manuscripts in the appropriate database with a specific project number. These manuscripts are listed to the screen and can be printed on a report. See information under QMENU1 above.

#### **QUPROG1/QAPROG1**

This procedure allows the user to retrieve all manuscripts in the appropriate database with a specific program code. The codes that are possible in the database for program are found in the table PGMS. The results of the query are listed to the screen and can be printed on a report. See information in QMENU1 above.

#### **QUTYPE1/QATYPE1**

This procedure allows the user to retrieve all manuscripts in the appropriate database with a specific type of report. The codes that are possible in the database for type of report are found in the table REPORTS. The results of the query are listed to the screen and can be printed on a report. See information in QMENU1 above.

#### **QUCTR1/QACTR1**

This procedure allows the user to retrieve all manuscripts in the appropriate database whose date in "LOC6IN" (to CTR) falls in a specified range. The dates given for minimum and maximum are included in the query request. This information is listed to the screen and can be printed to a report. See information in QMENU1 above. The printed report groups records by program.

#### **QUALL1/QAALL1**

This procedure allows the user to retrieve all manuscripts in the appropriate database and list them to the screen in table form. All fields are not visible at one time; use the tab key or the right arrow to scroll across.

## UPDMS4

This procedure allows the user to record movement of a manuscript from one location to another. A 'routing sheet' form is used. LOC10OUT is the last location to be used; locs 11,12,13, and 14 are not used at this time. LOC15IN is the date of bibliographic entry. That date is entered through the bibliography selection, not the update selection.

When UPDMS4 is invoked it stores the last location that had a date when the update routine was entered (LASTVAR). After the update process is completed (Do\_It!), the routine FLDIN interrogates the database and sees what locations (after LASTVAR) have dates. It makes the assumption that the users will not update to a location before the LASTVAR location. If a user does do that, there will be no diary entry to reflect that activity. The procedure uses the routine LOOK to attach names to the location positions and makes the entry in the diary. If loc6out (CTR/Director's Approval) was given a date, the routine FLDIN checks to see if the manuscript is an open file (OF). If it is, a prompt is issued for the report number. Report numbers for other types of manuscripts can be added in the bibliographic entry section (procedure MSREFR1).

### FLDIN

This procedure is called by UPDMS4 after locations have been updated. The locations are updated during a WAIT RECORD, so UPDMS4 does not know which variables have been changed. This routine checks all locations (variables) that occur after the last location that had a date when the update function was invoked. It checks all because some locations may be skipped. It checks from LASTVAR through loc10out. Locs 11,12,13,14 in/out are not currently used in this database and loc15in is a date for the bibliographic entry.

If a manuscript has been returned from CTR/Dir's approval (currently loc6out), the script checks to see if the report type is an open file (OF). If it is, then the user is prompted for the report number. This report number should be entered in its entirety (OF1-123).

### LOOK

This procedure matches the database variables with the names of the 'actual' location. If the routing of the manuscripts changes - the following changes need to be made: (1) Change form F1 for BIB, both the description and the field (2) Change the script LOOK in TRKLIB.SC to agree with form F1 for BIB. The only 'hard coded' reference to variable names is in QUCTR and UPDMS4 (where it starts looking backwards from LOC10IN)

LOC	Description
1	"Review Commitee"
2	"Reviewers"
3	"TPSG"
4	"GNU"
5	"ABC"
6	"CTR"/Director's Approval"
7	"CTR-repro"
8	"Ozalid"
9	"clerical-copying"
10	"CTR-OFSS"
15	"Bibliography"

### **RMENU1**

This procedure displays the menu for reviewer manipulation.

**Assign reviewers:** Assign reviewers to manuscript  
**List reviewers:** List all reviewers for certain manuscript  
**Add reviewers:** Assign additional reviewer(s) to manuscript  
**Examine histogram:** Look at DB of reviewers  
**Return:** Return to previous menu level

### **RASIGN1**

This procedure assigns initial reviewers; it cannot add reviewers. The procedure requests the BG no., opens the BIB table, displays the author, title, and other information and asks if this is the correct manuscript. If so, it retrieves the report type, and displays a form for entry of reviewers' names. The procedure enters reviewers' names into REVIEW table. Then it checks the HISTO table and adds a reviewer's name and type of manuscript or just adds the type of manuscript in the first available space MS1-MS25 to an existing entry. The procedure will add to an existing entry only if the reviewer already exists EXACTLY as entered. An entry is made in the diary when reviewers are assigned.

### **RLIST1**

This procedure prompts for manuscript number (BG no.) and lists all reviewers for that manuscript.

### **RADD1**

This procedure allows user to add reviewers (1 at a time) to a given manuscript. The same process that is used in RASIGN1 is used here to add names to the REVIEW table and add manuscript codes and reviewer's names to the HISTO table. When the manuscript is displayed and the banner reads "Press [F2] if this is the correct manuscript. Press [ESC] if this is NOT the correct manuscript", if the user presses ENTER, the next

manuscript in the database is displayed. The up- and down-arrows also work to look at different manuscripts in the database. An entry is made in the diary when a reviewer is added.

### **RHIST1**

This procedure allows user to look at histogram that contains the types of manuscripts each reviewer has reviewed. The HISTO table is set up to take 25 manuscripts. This table should be reset at some interval (See MAINT1). The menu choices are:

<b>Whole histogram:</b>	Look at entire histogram
<b>Look at one reviewer:</b>	List only one reviewer
<b>Return:</b>	Return to previous menu level

## EDITMS1

This procedure allows the information about the manuscript to be changed. This has nothing to do with the location of the manuscript. The menu choices are:

<b>Author:</b>	Primary author
<b>AddAuthor:</b>	Additional authors
<b>Title:</b>	Title
<b>AddTitle:</b>	Additional title
<b>Type:</b>	Manuscript type
<b>Project:</b>	Project number
<b>Program:</b>	Program
<b>None:</b>	Don't wish to edit any of these

A diary entry is made when information about the manuscript is edited.

## DELMS1

This procedure deletes a manuscript from the active database (BIB). This does not delete the manuscript from the REVIEW table. An entry is made in DIARYMS when a manuscript is deleted.

## MAINT1

This procedure contains maintenance features. The main menu has the following form:

<b>Diary:</b>	Sort and rename current diary
<b>Histogram:</b>	Sort and store current file and start new histogram
<b>Reset:</b>	Edit the prefix/year and set number for ms to 1
<b>Unload:</b>	Unload entire database to ASCII files
<b>Return:</b>	Return to previous menu level

The diary is an ASCII file named DIARYMS that is created and stored chronologically. When the "Diary" selection is chosen the following actions take place:

- a. The diary file is sorted by the BG number; a file named DIARYBG is created. The DOS SORT command is accessed via the Paradox RUN command.
- b. The file is renamed to be DIA + month + day + year. Month, day, year are obtained from Paradox functions. The next time MSTRACK is executed, the DIARYMS file is created.
- c. If the user wants to print the diary files, they must leave the application and return to DOS to print the diary. The diary cannot be printed through Paradox (PAL manual, version 3.0, p. 347 & PC PowerTools p. 845) because it generates the error "Insufficient memory to return to Paradox".

The histogram is stored as Paradox data table HISTO. Periodically the histogram table should be purged and a new one started. When the "Histogram" selection is chosen the following actions take place:

- a. The HISTO table is sorted using the Paradox SORT command by last name of the reviewer. The original table is overwritten with the sorted table.
- b. A PARADOX report is created from the HISTO table and named FRQ + month + year (obtained from Paradox functions).
- c. The Paradox table HISTO is emptied of its records.
- d. To print the histogram information, the user needs to exit to DOS and print the report file since the Paradox table is empty at this time. Before this selection is chosen the histogram can be printed through the REVIEWER selection of the main menu.

The "Reset" option allows the user to change the four-character prefix used for the BG number (found in table BNUM) and automatically resets the manuscript sequencing number to 1 (found in table RNUM). The prefix must be exactly four digits.

The "Unload" option converts the Paradox data tables into ASCII files that could be used to transfer the tracking data to another database management system. All tables that contain data are converted. There are several 'dummy' Paradox tables that are not included in the UNLOAD selection (JCTR and HIST2). These dummy tables are used throughout the system for various reasons. They tables need to exist in Paradox for certain functions to take place properly, but in another DBMS, they may not be necessary.

Table Name - - - - - > ASCII file created

Bib	BIB.ASC
Bnum	BNUM.ASC
Pgms	PGMS.ASC
Reports	REP.ASC
Review	REV.ASC
Rnum	RNO.ASC
Histo	HISTO.ASC
Arch	ARCH.ASC
Ref	REF.ASC

#### MSREFR1

This procedure allows user to make a complete, official bibliographic entry for a manuscript, edit an existing bibliographic entry, or add the official report number. It does not allow this entry unless the manuscript is still in the active database (Paradox table BIB) and has Director's approval. A manuscript cannot move from the active database (BIB) to the archival database (ARCH) unless the bibliographic entry has been

made.

The bibliographic entry is made into Paradox table REF. The field DIRAPP is the same as the field LOC6OUT in the tables BIB/ARCH. The field BRANCHBIBLIO? is for use when software is developed to pull the information from REF for the branch bibliography. This will be a flag to indicate when a manuscript has already been included in a branch bibliography.

#### **MOV2AR1**

This procedure is used to move a manuscript from the active database (BIB) to the archival database (ARCH). The dates for Director's approval and bibliographic entry must exist.

Structure for Table BIB

Field Name	Field Type
-----	-----
Beg_no	A7*
Author1	A50
Authorrem	A255
Type	A2
Proj	A13
Prog	A6
Report_no	A10
Titlelong1	A255
Titlelong2	A255
Loc1in	D
Loc1out	D
Loc2in	D
Loc2out	D
Loc3in	D
Loc3out	D
Loc4in	D
Loc4out	D
Loc5in	D
Loc5out	D
Loc6in	D
Loc6out	D
Loc7in	D
Loc7out	D
Loc8in	D
Loc8out	D
Loc9in	D
Loc9out	D
Loc10in	D
Loc10out	D
Loc15in	D

Structure for Table ARCH

Field Name	Field Type
-----	-----
Beg_no	A7*
Author1	A50
Authorrem	A255
Type	A2
Proj	A13
Prog	A6
Report_no	A10
Titlelong1	A255
Titlelong2	A255
Loc1in	D
Loc1out	D
Loc2in	D
Loc2out	D
Loc3in	D
Loc3out	D
Loc4in	D
Loc4out	D
Loc5in	D
Loc5out	D
Loc6in	D
Loc6out	D
Loc7in	D
Loc7out	D
Loc8in	D
Loc8out	D
Loc9in	D
Loc9out	D
Loc10in	D
Loc10out	D
Loc15in	D

Structure for Table RNUM

Field Name	Field Type
Msnum	N

Structure for Table BNUM

Field Name	Field Type
Begno	A4

Structure for Table REVIEW

Field Name	Field Type
Beg_no	A7*
Rev1	A30
Rev2	A30
Rev3	A30
Rev4	A30
R1to	D
R1bak	D
R2to	D
R2bak	D
R3to	D
R3bak	D
R4to	D
R4bak	D

Structure for Table HISTO

Field Name	Field Type
Revr	A30
Ms1	A1
Ms2	A1
Ms3	A1
Ms4	A1
Ms5	A1
Ms6	A1
Ms7	A1
Ms8	A1
Ms9	A1
Ms10	A1
MS11	A1
Ms12	A1
Ms13	A1
Ms14	A1
Ms15	A1
Ms16	A1
Ms17	A1
Ms18	A1
Ms19	A1
Ms20	A1
Ms21	A1
Ms22	A1
Ms23	A1
Ms24	A1
Ms25	A1

Structure for Table HIST2

Field Name	Field Type
Revr	A30
Ms1	A1
Ms2	A1
Ms3	A1
Ms4	A1
Ms5	A1
Ms6	A1
Ms7	A1
Ms8	A1
Ms9	A1
Ms10	A1
Ms11	A1
Ms12	A1
Ms13	A1
Ms14	A1
Ms15	A1
Ms16	A1
Ms17	A1
Ms18	A1
Ms19	A1
Ms20	A1
Ms21	A1
Ms22	A1
Ms23	A1
Ms24	A1
Ms25	A1

Structure for Table REPORTS

Field Name	Field Type
Type	A2
Code	A1

Structure for Table PGMS

Field Name	Field Type
Type	A6

Structure for Table CTR

Field Name	Field Type
Beg_no	A7
Author1	A50
Authorrem	A255
Type	A2
Proj	A13
Prog	A6
Titlelong1	A255
Loc6in	D

Structure for Table JCTR

Field Name	Field Type
Beg_no	A7
Author1	A50
Authorrem	A255
Type	A2
Proj	A13
Prog	A6
Titlelong1	A255
Loc6in	D

Structure for table REF

Field Name	Field Type
Beg_no	A7*
Dirapp	D
Branchbiblio?	A1
Bib1	A255
Bib2	A255
Bib3	A255

Form F1 for Bib table  
"Routing Sheet" form

Press [F2] when done or [esc] to abort

BG number:	Report type:	Project:	
Author:		Program:	
Title:			
Report number:		DATE TO	DATE FROM
Review Committee			
Reviewers (all)			
TPSG			
Geologic Names Unit			
Associate Branch Chief			
TO CTR / Director's Approval			
To CTR (repro)			
To Ozalid Room			
To clerical (copying)			
To CTR (OFSS)			

10/90

Form F2 for Bib table

Author AddAuthor Title AddTitle Type Project Program None

```
*****
*                TECHNICAL PUBLICATIONS SUPPORT GROUP, BGC                10/4/90 *
*                Edit Manuscript Information                                *
*****
* BG Number:                Project number:                                *
* Report type:              Program:                                       *
* Author:                                                            *
* Additional Authors:                                               *
*                                                                    *
*                                                                    *
* Title:                                                            *
*                                                                    *
* Additional Title:                                               *
*                                                                    *
*****
```

Form F3 for Bib table

Press [F2] when done or [esc] to abort

%%  
% TECHNICAL PUBLICATIONS SUPPORT GROUP, BGC %  
% Manuscript Tracking -- Initial Entry 10/90 %  
%%

Manuscript Number (BG number):

Author:

Additional Authors:

Title:

Additional Title:

Report type: (Press [F1] for help)

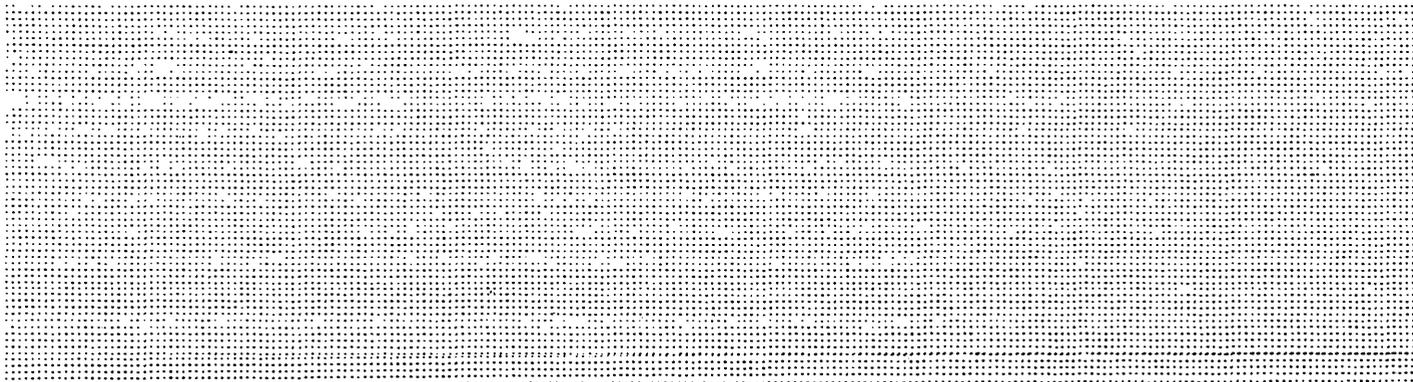
Project number:

Program: (Press [F1] for help)

Date:

Form F4 for Bib table  
(Form F1 from Review table embedded)

BG number: \_\_\_\_\_  
Report type: \_\_\_\_\_  
Project: \_\_\_\_\_ Program: \_\_\_\_\_  
Author: \_\_\_\_\_  
Title: \_\_\_\_\_



Form as it appears on screen

Press [F2] when done

BG number:  
Report type:  
Project: Program:  
Author:  
Title:

Reviewers' Names

Date sent to Reviewer

1st Reviewer :  
2nd Reviewer :  
3rd Reviewer :  
4th Reviewer :

Form F1 for Review table  
(Embedded on Form F4 for Bib table)

	Reviewers' Names	Date sent to Reviewer
1st Reviewer :	_____	_____
2nd Reviewer :	_____	_____
3rd Reviewer :	_____	_____
4th Reviewer :	_____	_____



Form F1 for Histo table

Number and types of manuscripts reviewed  
by

---

Codes:           ! Abstract               @ Administrative Report  
                 # Bulletin           \$ Circular  
                 % Prof. Paper       & Map Folio  
                 \* Open File         + Outside Report

---

Manuscripts to CTR

\_\_\_\_\_ Type of report: \_\_\_\_\_ Project Number: \_\_\_\_\_  
Program: \_\_\_\_\_ Date to CTR: \_\_\_\_\_

Primary Author: \_\_\_\_\_  
Additional Authors: \_\_\_\_\_

Title: \_\_\_\_\_

Manuscripts by Project

---

\_\_\_\_\_ Type of report: \_\_\_\_  
Program: \_\_\_\_\_

Primary Author: \_\_\_\_\_  
Additional Authors: \_\_\_\_\_

Title: \_\_\_\_\_

Manuscripts by Program

\_\_\_\_\_ Type of report: \_\_\_\_  
Project: \_\_\_\_\_

Primary Author: \_\_\_\_\_  
Additional Authors: \_\_\_\_\_

Title: \_\_\_\_\_

Manuscripts by  
requested author

\_\_\_\_\_ Type of report: \_\_\_\_\_ Project Number: \_\_\_\_\_

Program: \_\_\_\_\_

Author: \_\_\_\_\_

Additional Authors: \_\_\_\_\_

Title: \_\_\_\_\_

Manuscripts by Type of manuscript

—

\_\_\_\_\_ Program: \_\_\_\_\_  
Project: \_\_\_\_\_

Primary Author: \_\_\_\_\_  
Additional Authors: \_\_\_\_\_

Title: \_\_\_\_\_



Report R3 for Jctr table

DpageDD

mm/dd/yy

Manuscripts by program  
AAAAAA

Page 99:

DformDD

AAAAAAA

Report type: AA      Project: AAAAAAAAAAAAAA  
Author: AA  
Other authors: AA  
  
Title: AA

DformDD

DpageDD

MM







