APPENDIX I
CD-ROM Technical Information(1)

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EQUIPMENT

The two basic pieces of equipment needed to use CD-ROM's are a microcomputer and a CD-ROM drive. A printer is very useful but not essential. Your microcomputer should be equipped with at least 640K random access memory (RAM). While a hard disk is not required on your microcomputer, it is very useful.

SOFTWARE

Software is needed for accessing the CD-ROM as well as for accessing the data.

MS-DOS 3.1 or higher is needed as your operating system if you have a CD-ROM reader. You will also need DOS file manager software such as Microsoft's CD-ROM Extensions. CD-ROM extensions is a collection of programs that enables the microcomputer to communicate with the attached CD-ROM drives. You must have version 2. 0 or higher of the Microsoft Extensions.

If you already have a CD-ROM drive, you may not know whether it is equipped with file manager software like the CD-ROM extensions. To find out, try signing on to your CD-ROM drive just as though it is a magnetic disk drive, and perform simple file management tasks, like listing the directory. (For example, from the DOS prompt, type the command DIR and the letter used to designate the CD-ROM drive followed by a colon [e. g. , C>DIR L:] and press enter.) If you get an error message, it may mean that you need to obtain and install CD-ROM extensions.

CD-ROM Extensions

Although all versions of CD-ROM extensions work basically the same way, installation procedures may vary slightly from one supplier to another. Many versions contain a program that will automatically install the software for you, after you have answered a few questions about the type of equipment that you plan to use. Be sure to follow the instructions for installing CD-ROM Extensions that are provided with the software.

The first step, if you are installing extensions without the aid of an automatic set-up program, is usually installing the device driver program and MSCDEX. EXE on your bootable disk. For computers containing a hard drive, this usually means drive C. The name of the device driver program varies from one version of extensions to another; one common practice of software developers is to name it after the brand of CD-ROM drive that it supports, e. g. , HITACHI. SYS. The device driver program and MSCDEX are

frequently set up in separate subdirectories; however, this practice is not universal.

The next step is to add a line to the CONFIG. SYS file to identify the device driver program. This line typically looks something like this:

DEVICE=\path\driver name/D:\driver alias/N:#

For example: device=\dev\HITACHI. SYS/D:MSCD001/N:1

The driver name (e. g. , HITACHI. SYS) and the driver alias should be provided by the set-up program or in the instructions that accompany the floppy disk containing the extensions software. The symbol # at the end of the line should be replaced with the number of CD-ROM drives (up to 4) that will be hooked up to the microcomputer.

The third step is to add a line to the AUTOEXEC. BAT file for running MSCDEX. EXE and assigning a letter to your CD-ROM drive. Depending on your system configuration you may opt to set up one or more batch files to accomplish the same purpose. If you add a line to the AUTOEXEC. BAT file, it will probably look something like this:

\path\MSCDEX. EXE/D:driver alias/M:8/L:L

For example: \BIN\MSCDEX. EXE/D:MSCD001/M:12/L:L

The driver alias, which is really the name that your system will use to identify the device driver, should be the same one that is named in your CONFIG. SYS file.

The number following M: is the number of memory buffers allocated (usually 8, but sometimes more). The last letter, following the L:; designates the letter assigned to the CD-ROM drive.

Though the final step is simple, it's also easy to overlook. You must reboot the system in order to activate the changes that you've made to your CONFIG. SYS and AUTOEXEC. BAT.

Once properly installed, the device behaves much like a read-only floppy diskette drive, and simple MS-DOS commands such as DIR are possible. If the computer reports that the CD-ROM is “not High Sierra,” you must first upgrade your Microsoft CD-ROM Extensions software to version 2. 0 or later.

Data Retrieval Software

This CD-ROM contains data retrieval software. This software was developed and tested on a COMPAQ Deskpro 286 with 640K RAM operating under MS-DOS 3.31. The software was compiled with Clipper (Summer '87). There are no special display requirements. Please note that the retrieval software will only run on IBM-compatibles operating under MS-DOS.

To execute, type GO at the DOS prompt and ENTER.

  Example: L:\>go

The data on the CD-ROM are in dBase III+™ format. Data in dBase III+ format are recognized by many software packages including dBaseIV™,

Foxbase™, Clipper™, SupercalcV™, Quattro Pro™, and VP-Planner™.

Users of other types of systems, such as the Apple Macintosh, have access to the files through support for ISO 9660 CD-ROMs.

CONVERTING TO ASCII FILES

Users without database management software who wish to convert the files to ASCII can follow the code found in the README file on the CD-ROM.

TECHNICAL DOCUMENTATION

The DOCUMENT directory on the CD-ROM contains sections of the Summary Tape File 3 technical documentation in a series of ASCII text files. These are as follows:

ROSTER_P.ASC	Roster Page
ACKNOW.ASC	Acknowledgments
CONTENTS.ASC	Contents
ABST_S3.ASC	Abstract
HOWTOUSE.ASC	How to Use the File
SUB_LOC.ASC	Subject Locator
LIST_TBL.ASC	List of Tables
TBL_OUT.ASC	Table Outlines
SUM_LEV.ASC	Summary Level Sequence Chart
USERNOTE.ASC	User Notes Explanation and Notes
IDEN_FTN.ASC	Identification Section of the Data Dictionary
TBL_MTX.ASC	Table (Matrix) Section of the Data Dictionary
APPEND_A.ASC	Appendix A Area Classifications
APPEND_B.ASC	Appendix B Subject Characteristics
APPEND_C.ASC	Appendix C Accuracy of the Data
APPEND_D.ASC	Appendix D Procedures
APPEND_E.ASC	Appendix E Facsimiles of Instructions
APPEND_F.ASC	Appendix F Data Products and User Assistance
APPEND_G.ASC	Appendix G Maps (Text only)
APPEND_H.ASC	Appendix H Code Lists
APPEND_I.ASC	Appendix I CD-ROM Technical Information

Figure 4. Reference Files

STF1STRU.DBF This file describes the structure of the 67 identification fields in the STF300 segment. This is in the format of a dBASE III extended structure which has been expanded to include brief field descriptions.

Structure for database: stf300.dbf
Number of data records: 67

```
               Field   Field Name     Type     Width  Dec

                 1     FIELD_NAME   Character   10
                 2     FIELD_TYPE   Character    1
                 3     FIELD_LEN    Numeric      3
                 4     FIELD_DEC    Numeric      3
                 5     FIELD_TEXT   Character   60
            ** Total **                         78

TABLES.DBF     This file describes the numeric data tables.

               Structure for database: tables.dbf
               Number of data records:   4,756

               Field    Field Name     Type     Width  Dec
                 1      TABLE        Character    6
                 2      FIELD        Character   10
                 3      TEXT         Character   68
                 4      SEGMENT      Character    6
            ** Total **                         91

CNAMESss.DBF   This file contains a list of county names and FIPS
               county codes for State ss.

               Structure for database

               Field      Field Name     Type     Width  Dec
                 1        CNTY         Character    3
                 2        ANPSADPI     Character   66
            ** Total **                           91

\DOCUMENT Directory of technical documentation files in ASCII text
          format.

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Figure 5. Index Files

TABLES.NDX     This is a dBASE III index file for TABLES.DBF. The key
                field is TABLE.

The following dBASE index files are for STF3??ss.DBF.

STF3AMss.NDX   The key fields are SUMLEV + CNTY + COUSUBFP + PLACEFP
                + TRACTBNA + BLCKGR.

STF1APss.NDX   The key fields are SUMLEV + PLACEFP.

STF3ATss.NDX   The key fields are SUMLEV + CNTY + TRACTBNA + BLCKGR.

STF3ALss.NDX   The key fields are SUMLEV + left(ANPSADPI,1).
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(1)Portions of this appendix are adapted from Administrative Notes, the Newsletter of the Federal Depository Library Program (May 22, 1989).