

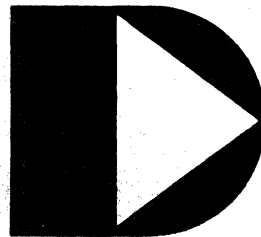
# **TECHNICAL MANUAL PRE-PROCESSOR MSCRIBE/MSINDEX User's Guide**

**Version 2**

**October, 1978**

Model Code No. 50238

**DATAPoint CORPORATION**



**The leader in dispersed data processing™**

**TECHNICAL MANUAL PRE-PROCESSOR  
MSCRIBE/MSINDEX**

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## PREFACE

The Technical Manual Pre-processor and Table of Contents/Index Generator is designed to simplify and standardize the writing of technical manuals. Using EDIT/CMD, the technical material is entered along with the few MSCRIBE commands and a small subset of SCRIBE commands into a disk file. MSCRIBE translates this pseudo-SCRIBE file to a SCRIBE file in the standard manual format and optionally creates a table of contents and/or an index. A print suppression capability, as in SCRIBE, allows different manuals to be generated from a common text. A companion program (MSINDEX) is released with MSCRIBE to simplify the generation of an index.

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## CHAPTER 1. DIFFERENCES FROM VERSION 1

The two differences between MSCRIBE Version 1 and Version 2 concern the boldfaced headings and the generation and creation of the index.

Since the final copy of the manual is usually printed on a Servo printer, the special headings are now boldfaced. The special headings now boldfaced include:

- Title
- "PREFACE"
- "TABLE OF CONTENTS"
- Chapter Titles
- Section Titles
- Appendix Titles
- "INDEX"
- Definition References (see chapter "MSINDEX")

The most significant difference between the old and new versions of MSCRIBE is in index generation. There were several problems concerning index generation with Version 1. Key phrases had to be indexed by using a unique keyword and then editing the /NXP file to contain the entire phrase. Changes made to a chapter forced re-creation of the index - often with the tedious task of answering "Yes"/"No" to all the references of keywords in the new chapter, then EDITing the new page numbers into the existing index. A mistakenly KILLED /NXP file meant re-creation of the entire index! Even an /NXP file with correct page numbers often required EDITing to remove tildes, add comments and indent entries.

The creation of an index has actually two steps. First, the originator of the manual needs to indicate what references in the text are to be included in the index. Unless all references are desired, these decisions MUST be made by the author. The second step is the actual creation of the /NXP file with the page numbers for the references. This second step should be a totally automatic procedure with no final editing required.

MSCRIBE Version 2, along with the companion program MSINDEX, provides an enhanced method of index generation. MSINDEX aids the author in the first step, the "marking" of important references. MSCRIBE uses the text marked by MSINDEX to produce a completely formatted, final version of the index. Changes may now be made to

the original text (additions marked for the index "by hand" if desired) and NOT force "re-marking" of the entire text. Reference "marking" is now a one-time step, with the /NXP file generation an automatic procedure which may easily be repeated with each modification made to the text.

The features of the new method of index generation include:

- \* Key phrases as well as key words referenced
- \* Option to reference all occurrences of key words and phrases
- \* "Display" option to allow the author to determine significant references
- \* Facility to mark some references as "definition" references that are boldfaced in the final index
- \* A "forcing" character to reference only the key words or phrases that EXACTLY match
- \* Option to build a sorted key file from a text previously "marked"
- \* A "finished" /NXP file correctly formatted so that no editing for indentation or deletion of characters need occur
- \* Increased limit of 256 indexed pages per chapter

See the chapters "INDEX" and "MSINDEX" for more detailed information.

## CHAPTER 2. INTRODUCTION

MSCRIBE allows the user to create standardized manuals by using a minimum of SCRIBE commands and the nineteen MSCRIBE commands. The MSCRIBE output file contains, in place of the MSCRIBE commands, the necessary SCRIBE commands for setting up chapter headings, page numbers, etc., according to the predetermined defaults for writing manuals. These defaults include:

- Margins at 1 and 66 (which are reset at every chapter and section)
- Page numbers and footings alternately printed in the lower right and left hand corners of the page
- Paragraph indention of 5 spaces
- Header length of 8 lines, body length of 48 lines and footer length of 10

The MSCRIBE generated table of contents has uniform spacing of titles of chapters, sections, subsections and appendices. MSCRIBE converts all chapter and appendix titles to upper case in the output SCRIBE file and in the table of contents.

Most of the MSCRIBE commands are for "one-time" initialization and title page preparation. Only six of these commands are needed for the body of the manual so that MSCRIBE is very easy to learn. For example, the body of a manual with "straight text" can be transformed into a standard format using only one MSCRIBE command: +M7 (signifying the beginning of a chapter) and one SCRIBE command: +PP (denoting a new paragraph). An unsophisticated SCRIBE user can produce a standard technical manual and need not learn more than a few SCRIBE commands.

In fact, MSCRIBE allows only forty of the hundred-odd SCRIBE commands to insure consistency of the manuals. SCRIBE commands such as +BH (begin header), +BLnnn (adjust body length), +ALnnn (adjust the left footing margin), etc. are ignored so that the MSCRIBE manuals have uniform body length, alternate left and right pagination, consistent footings and identical chapter formatting. See the appendix, "USABLE SCRIBE COMMANDS", for a complete list of allowable commands. Note that MSCRIBE commands may be entered in either upper case or lower case.

MSCRIBE translates the "pseudo-SCRIBE" text disk file into a second "standard" SCRIBE disk file. This "standard" SCRIBE disk



file may be EDITed to modify the SCRIBE commands that MSCRIBE produces or to add any SCRIBE commands the user finds he needs to adapt the manuals to his particular standards. The SCRIBE file may then be processed by DSCRIBE to list on the screen for visual proofing and then print a paper copy on a local, servo or remote printer or a selectric typewriter.

## 2.1 MSCRIBE Command Line and Options

The MSCRIBE command line is entered as follows:

```
MSCRIBE <filename>[/ext][:drn];[C][X][O]
```

where square-bracketed items are optional.

The command:

```
MSCRIBE MANUAL/CH1
```

causes MSCRIBE to process the text disk file MANUAL/CH1 to create a file MANUAL/MSP to be used as input to DSCRIBE. If no extension appears on the command line, the text disk file is assumed to have the extension /TXT. All drives are searched if no drive is specified.

The extension of the output file of MSCRIBE is always /MSP. Beginning with drive zero, MSCRIBE looks for a file called <name>/MSP to overwrite with the new MSCRIBEd text. If no file with that name exists, the file <name>/MSP is created on the first available drive. To direct a new /MSP file to a certain drive, a null file called <name>/MSP should be EDITed on the desired drive; MSCRIBE will overwrite the null file.

### 2.1.1 The C Option

The option "C" on the command line indicates that a table of contents should also be built. If this option is entered, MSCRIBE builds a text disk file with the extension /TCP that contains the table of contents and has the correct SCRIBE commands to link to the /MSP file during DSCRIBing. A "click" occurs as each chapter, section, subsection and appendix is entered into the table of contents. The /TCP file is placed on drive zero unless a file by that name already exists on another drive (as with the /MSP file).

```
MSCRIBE MANUAL;C
```

processes disk file MANUAL/TXT creating MANUAL/TCP and MANUAL/MSP.

### 2.1.2 The X Option

The option "X" on the command line indicates that an index file as well as the /MSP file should be created. MSCRIBE expects the existence of a file called <name>/KEY when this option is entered. See the chapter on "INDEX" for the details of the construction of the /KEY file.

```
MSCRIBE PART1/MAN;X
```

converts disk file PART1/MAN to a SCRIBE file PART1/MSP. MSCRIBE expects PART1/KEY to exist to help in the creation of the index file PART1/NXP. As above, all new files are placed on the first available drive. An additional program is released with MSCRIBE to facilitate the generation of an index. This program, MSINDEX, is described in the chapter on "MSINDEX".

### 2.1.3 The O Option

The "O" option must be specified in conjunction with the C option and/or the X option. It signifies that either the table of contents or the index or both files are to be created without rewriting the /MSP file.

## 2.2 Error Messages and Informative Displays

MSCRIBE identifies itself as:

```
TECHNICAL MANUAL PRE-PROCESSOR
```

with the version and date.

MSCRIBE also reminds the user that:

```
THE TABLE OF CONTENTS WILL BE IN <name> /TCP
```

if the C option is entered on the command line.

An X on the command line produces the following display:

```
INDEX FILE WILL BE IN <name>/NXP  
nnn KEYWORDS MAY BE INDEXED
```

where nnn may be up to 255 depending on the processor memory size. (See chapters on "INDEX" and "MSINDEX".)

If no filename appears on the MSCRIBE command line, the message:

NAME REQUIRED

is displayed.

INVALID DRIVE

signifies that the drive number is not in standard form or that it is out of range.

If the filename is in the correct form on the command line but no file of that name exists on on-line drives, a message appears:

FILE NOT FOUND.

Any characters other than "C", "O", or "X" entered following the semi-colon produces:

BAD OPTION PARAMETER!!! VALID OPTIONS ARE C, O, AND X!

MSCRIBE ENDED.

"O" may not be the only option entered:

MUST SPECIFY "C" OR "X" OR BOTH WITH "O"

If MSCRIBE encounters any errors or illegal commands, the message:

COMMAND ERROR +QQ IN LINE nnn OF <name>/TXT  
+qq This was supposed to be a new paragraph.

is displayed, where the second line is the incorrect line in the text file.

Also, the string

"+SL1 COMMAND ERROR ++QQ +SL1"

is included in the /MSP file so that when the file is DESCRIBED errors may easily be found in the listing.

The warning that:

MSCRIBE COMMAND +Mn IS OUT OF SEQUENCE

may appear during the writing of the /MSP file if one of the MSCRIBE commands +M1,..,+M7 were omitted.

The message:

<filename1 ext> NOT FOUND.  
IN LINE nnn OF <filename2>

means that no <filename1> existed to open by the +D1<filename1>+F1 command in <filename2>.

Several error messages may occur if the "X" option is selected:

NO KEY FILE

TOO MANY WORDS IN KEY FILE

These messages are explained in the chapter on "INDEX".

## CHAPTER 3. MANUAL INITIALIZATION

The MSCRIBE commands +M1 through +M6 concern the title page, the preface and the table of contents.

### 3.1 Title Page

MSCRIBE commands +M1, +M2, +M3 and +M4 format the title page. Everything following a +M1 up to the next command or end-of-line is considered to be the manual title. The title that is entered here appears in the left footing of every even page within each chapter. MSCRIBE converts the title to upper case regardless of the way it appears in the text file. The horizontal spacing of the title follows the SCRIBE convention (more than one space between words is not permitted); however, in the footing, the title appears "as is" in regards to horizontal spacing. For example,

+m1 Monthly Report

appears as:

MONTHLY REPORT

on the title page but appears as:

1-2 MONTHLY REPORT

in the left-hand footings.

+M2 is followed by a subtitle which is not converted to upper case. The date may be entered using +M3. Up to four +M4 commands may be entered to print out the author, the department, the company and other identification. As in the +M1 command, each line is considered terminated at the next command or the end-of-line.

#### EXAMPLE:

Pseudo-SCRIBE Text:

```
+m1Monthly Report
+m2(January)
+m3February 1, 1978+SU4
+m4John Smith
+m4Personnel Department
+m4The Company
```

+m4Anywhere, USA

SCRIBE Text Output:

+HL8+BL48+FL10+PN+PC

+IS5+LM1+RM66+AL1+AR66+SL19+BF+CN

+LFMONTHLY REPORT+BE+SL3

(January) +SL1

February 1, 1977+SU5

John Smith +NL

Personnel Department +NL

The Company +NL

Anywhere, USA +NL

DSCRIBE will print this as:

**MONTHLY REPORT**

(January)

February 1, 1977

John Smith  
Personnel Department  
The Company  
Anywhere, USA

### 3.2 Preface

The MSCRIBE command for the Preface is +M5. Everything between the +M5 and +M6 (Table of Contents) is treated as the body of the Preface. The word "PREFACE" is centered and boldfaced at the top of the page. The body of the Preface is double-spaced. The Preface and the Table of Contents is numbered in lower case centered Roman numerals. The +m5 (and thus the Preface) may be omitted; however, MSCRIBE displays the message:

```
MSCRIBE COMMAND +M6 IS OUT OF SEQUENCE
```

just in case the omission is not intended.

#### EXAMPLE:

Pseudo-SCRIBE Text:

```
+m5 This is a short preface.  
+m6
```

SCRIBE Text Output:

```
+PG  
+CN  
+NL+LS2+BF PREFACE +BE  
+RN  
+PP1  
+LJ  
This is a short preface.
```

### 3.3 Table of Contents

The MSCRIBE command +M6 causes linkage to the table of contents SCRIBE file. If a "C" is entered as an option, MSCRIBE processes the Pseudo-SCRIBE file generating page numbers and looking for chapter headings (+M7), section headings (+M8) and appendix titles (+M9). These titles are entered into the generated table of contents with their respective page numbers. Page numbers for chapters and sections consist of digits for the chapter, a dash, and digits for the page within the chapter (e.g., the first page of Chapter 1 is 1-1).

Appendices have no page numbers in the table of contents; however, if there are sections within the appendix, the page number for the section consists of a single or double letter for the appendix, a dash, and digits for the page within the appendix (e.g., a section occurring on the first page of Appendix A has the



page number A-1). The manual is limited to 75 chapters and 52 appendices, each with up to 999 pages.

The words "TABLE OF CONTENTS" are centered and boldfaced at the top of the page. The word "page" appears "tabbed right" from column 65 on the third line down from the title. Below that is the first chapter number and heading. All chapter headings are preceded by blank lines. Immediately below each chapter heading are the sections and subsections within the chapter. The subsections are tabbed to the right three columns for each sublevel below the chapter (e.g., the title for Subsection 3.1.5.2.4 begins in the twelfth column). Page numbers are "tabbed right" from column 65.

EXAMPLE:

Pseudo-SCRIBE Text:  
+M6

SCRIBE Text Output:  
+LS1  
+PG  
+D2<filename>/TCP+F2

A sample "TABLE OF CONTENTS" follows:

## TABLE OF CONTENTS

	page
1. THE "AS IS" COMMAND	1-1
1.1 The First Section in the "As Is" Command Chapter	1-1
1.2 The Second Section of the "As Is" Test Chapter	1-2
2. TESTING THE SECTION NUMBERS	2-1
2.1 First Section in Section Number Test	2-1
2.1.0.0.0.0.1 Bad Section Number (Jumped Out of Sequence)	2-1
2.1.1 A Proper Sub-Section	2-1
2.1.1.1 More Subsections	2-1
2.1.1.1.1 Fifth Level	2-1
2.1.1.1.1.1 Sixth Level	2-1
2.1.1.1.1.1.1 Seventh Level	2-1
2.1.1.1.1.1.1.1.1 A Test of a Long Section Title with a Long Section Number	2-1
2.1.1.1.1.1.1.1.1.1 The Next To Last Good Section	2-2
2.1.1.1.1.1.1.1.1.1.1 Last Good Section Number	2-2
2.1.1.1.2 Section Incremented Correctly?	2-2
2.1.1.1.2.1 Make Sure Table Cleared So That This Is a Proper Entry	2-2
2.1.2 An Incorrectly Entered Subsection (Letter Instead of Digit)	2-2
2.1.3 What Happens if There Is a + in the Section Title?	2-2
3. CHECK OF SCRIBE COMMANDS	3-1
3.1 New Section to Correct Margins	3-1
3.2 Tabs	3-3
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Appendix A. FIRST APPENDIX	
A.1 Appendix Section	A-1
A.1.1 Appendix Subsection	A-1

## CHAPTER 4. CHAPTERS, SECTIONS, SUBSECTIONS AND APPENDICES

The first +M7 signifies the beginning of the body of the manual. Up to this point, MSCRIBE ignores anything other than the MSCRIBE commands +MV, +ME, +MS, +MT, +MP, +NP, and +M1 through +M6. If it is desired to set tabs to be in effect for the entire manual, for example, the SCRIBE commands must appear AFTER the first +m7. If a section or appendix is encountered before a chapter, an "OUT OF SEQUENCE" message appears on the screen. MSCRIBE proceeds with its processing; however, there may be some errors since proper initialization will not have occurred.

### 4.1 Chapters

The MSCRIBE command +M7 indicates that the remainder of the line (to the end of the line or to the next command) is a chapter number and name. A chapter number must appear after the +M7 and the number must be followed by a decimal point. A manual may have up to 75 chapters, each with up to 999 pages. During creation of the text file which is to be input to MSCRIBE, it is suggested that chapters be numbered sequentially beginning with CHAPTER 1. However, if it becomes necessary to rearrange the chapters within the manual or insert additional chapters between two existing ones, there is no need to renumber the +M7 commands. MSCRIBE numbers the chapters sequentially in the order that the +M7 commands are encountered regardless of what digit follows the +m7 command. It does not matter what number is there; but it does matter that some number is present.

The chapter name appears in upper case in the text and in the table of contents. This name also appears as a footing in the chapter. As in the +m1 command, horizontal spacing occurs "as is" in the footing. Caution: MSCRIBE correctly processes a chapter with a "+" in its title for the text and the table of contents. However, DSCRIBE reads in the footing up to the first "+". Thus, a "+" in a chapter heading produces an incomplete footing.

In the manual text, the chapter number and name are preceded by "CHAPTER", capitalized, boldfaced, and centered at the top of the page. The margins and the manual justification (either left or even margin) are reset. The first page of a chapter is on a right-hand page with the page number in the lower right-hand corner. Following pages are numbered alternately in the lower

left-hand and lower right-hand corners so that when the pages are printed back to back, page numbers are on the outer edge. Page numbers consist of digits for the chapter, a dash and digits for the page number within the chapter (e.g., the first page of Chapter 1 is 1-1). Also, next to the page number is a footing; right-hand pages have the current chapter name, and left-hand pages have the manual name. The body of the chapter is single-spaced with a paragraph indentation of five columns. The text is left justified unless the manual even margins (+ME) has been requested.

**EXAMPLE:**

Pseudo-SCRIBE Text:  
+M7 2. Introduction

SCRIBE Text Output:  
+PG+LS1  
+CN  
+LM1+RM66+BF+NL  
+RF CHAPTER 1. INTRODUCTION+BE+PP3  
+PM 1-1  
+LJ

## 4.2 Sections

The MSCRIBE command +M8 indicates that the remainder of the line (to the end-of-line so that commands and additional information may be included on the same line) is a section number and name. Sections may occur within chapters or appendices.

Again, it is suggested that section numbers be entered sequentially and start with the chapter number or appendix letter. The chapter or appendix character is followed by a decimal point and number for each sublevel under the chapter or appendix (e.g. 3.2.1 is the first subsection under the second section under the third chapter and A.1 is the first section under Appendix A). However, if the chapters or sections are re-ordered, deleted or new parts of text inserted, there is no need to renumber the sections or subsections. MSCRIBE puts the current chapter number or appendix letter into the first digit of the section number and increments the subsection according to how many decimal points appear in the section number following the +m8. So, it is important to have the correct number of digits and decimal points indicating the level of the subsection but it is not necessary that the number has the correct digits. A maximum of ten sub-levels of a chapter or appendix is recognized.

The section number and name appears left-justified, boldfaced, and separated from the preceding paragraph by two blank lines. A blank line also follows the section name and number. Margins and the manual justification (either left or even margins) are reset.

**EXAMPLE:**

Pseudo-SCRIBE Text:

+M8 2.5.3 First Subsection of the First Section of the  
Manual

SCRIBE Text Output:

+LM1+RM66+SL2+PS8+BF+LJ

1.1.1 First Subsection of the First Section of the  
Manual

+BE+PP1

### **4.3 Appendices**

The MSCRIBE command +M9 indicates that the remainder of the line (to the end-of-line or next command) is an appendix letter and name. Appendix letters should be sequential and entered in upper case. An appendix letter must appear. The letter may be doubled when the single letters are exhausted (e.g., Appendix Z is followed by Appendix AA). As with chapter numbers, MSCRIBE supplies the correct appendix letter regardless of what is entered. A letter must appear, however, followed by a decimal point or an error will result.

The same remarks concerning chapter names applies to appendix names (see the "Chapters" section). The appendix letter and name are preceded by "APPENDIX", capitalized, boldfaced, and centered at the top of the page. Margins and the manual justification (either left or even margins) are reset. The first page of an appendix is on a right-hand page with the page number in the lower right-hand corner. Following pages are numbered alternately in the lower left- and right-hand corners so that when the pages are printed back to back and bound, page numbers are on the outer edge. Next to the page numbers are footings; on the right-hand page is the current appendix name, and on the left-hand page is the manual name. Page numbers consist of the appendix letter (or letters), a dash, and digits for the page within the appendix.

**EXAMPLE:**

Pseudo-SCRIBE Text:  
+M9 B. First Appendix

SCRIBE Text Output:

+PG  
+CN  
+LM1+RM66+BF+NL  
+RF APPENDIX A. FIRST APPENDIX +BE+PP3  
+PM A-1  
+LJ

**4.4 End of Manual**

At the end of the file, the page heading is cancelled and the page ejected.

**EXAMPLE:**

SCRIBE Text Output:  
+NH+PG

## CHAPTER 5. VOLUME INITIALIZATION AND MANUAL EVEN MARGINS

The commands +MVnn and +ME are special MSCRIBE commands that, if used, must appear at the beginning of the text file. If both commands are used, the +MVnn command should be entered first.

### 5.1 Volume Initialization

In the process of proofing and editing a very long manual, it may be advantageous to break the long text into several files, for example, a separate file for each chapter. The +MV command may be used to "initialize" each separate chapter so that MSCRIBE generates the proper SCRIBE commands for starting a manual at a chapter. The chapter or appendix character is entered in the nn position of the +MVnn command.

The name of the manual follows the command on the same line so that the proper footings are printed. The +MVnn command allows the user to MSCRIBE chapters individually either during development or last minute editing.

If the +MV command has been used during development of the manual, there is no need to BLOKEDIT the chapters together to make a composite text file for input to MSCRIBE. MSCRIBE ignores the +MVnn commands if it is MSCRIBing the entire manual and the chapters and appendices may be linked by inserting the command:

```
+D1<next chapter> /<ext>+F1
```

at the end of each file . MSCRIBE builds a single file named <first chapter> /MSP which contains all the MSCRIBed text. The table of contents generation is not affected by the +MVnn commands when the entire manual is processed.

#### EXAMPLE:

```
Pseudo-SCRIBE Text:  
+MV53 LONG MANUAL  
+M7 53. Fifty-third Chapter
```

SCRIBE Text Output:

```
+HL8+BL48+FL10+PN+PC+LM1+RM66+PL
+LFLONG MANUAL+IS5+AL1+AR66+PL
(The above is generated by the +MV53 command)
+PG+LS1
+CN
+LM1+RM66+BF+NL
+RF CHAPTER 53. FIFTY-THIRD CHAPTER +BE+PP3
+PM 53-1
+LJ
```

## 5.2 Manual Even Margins

The default justification for the manual is "ragged right" or left-justification. The SCRIBE commands +EM, +RJ, and +CN may be used for tables and special text within the manual. However, each section, chapter and appendix will reset left-justification. If it is desired to have the entire margin with even margins (except for tables and special text), then the +ME command should be entered at the beginning of the first file. This will cause all the MSCRIBE generated SCRIBE commands "+LJ" to be changed to "+EM". As the preface and each chapter, section, and appendix is encountered, the justification is reset to even margins rather than left-justification.



## CHAPTER 6. MSCRIBE PRINT SUPPRESSION

As in SCRIBE, it is possible to print up to two-hundred fifty-five different pieces of text and to set switches to enable one or all of the texts to be included in the /MSP file. This feature is convenient, for instance, if several different versions of the same basic text need to be printed. Perhaps, the same technical manual can be made relevant to two related subjects if some sections are deleted or additional chapters are inserted. If these manuals existed as two separate files, both would need to be updated on common material. However, MSCRIBE print suppression allows a single text file to be the basic text for several different versions.

### 6.1 Print Suppression Switches

+MSnnn (where nnn has the range of 1 to 255) is the command to turn ON the indicated switch. The switches are only meaningful when used in conjunction with the print suppression command (+MPnnn)

+MTnnn turns OFF the switch nnn. The default assumption is that all switches are OFF when MSCRIBE begins.

### 6.2 Print Suppress Initialization

+MPnnn signifies that the text which follows it should be printed only if the switch nnn is ON. If the switch is off, the text and all commands embedded in the suppressed text (except +NP) are ignored.

+NP indicates the end of print suppressed text. The table of contents generation, index references and the MSP file consider only the text that is not suppressed.

### 6.3 Example of Print Suppression

INPUT TO MSCRIBE:

Part No. 114423+sp2.....+sp2 +mp12 Retail Price: \$414.98  
+np+mp15Wholesale Price: \$375.98 +np

TEXT IN /MSP FILE WITH +MS12 SET:

Part No. 114423+sp2.....+sp2Retail Price: \$414.98

TEXT IN /MSP FILE WITH +MS15 SET:

Part No. 114423+sp2.....+sp2Wholesale Price: \$375.98

TEXT IN /MSP FILE WITH +MS12 AND +MS15 SET:

Part No. 114423+sp2.....+sp2Retail Price: \$414.98 Wholesale  
Price: \$375.98

### 6.4 Use of Print Suppression

The SCRIBE switches, +S1, +S2, +S3 and +SWnnn, along with their corresponding print suppression commands +P1, +P2, +P3 and +PWnnn are flagged as errors if they appear in files that are being MSCRIBEd. MSCRIBE needs to know exactly what text is going to appear in the final printed version in order to calculate the table of contents and the index. The MSCRIBE print suppression switches allow the same capabilities as the SCRIBE switches and since they are set before MSCRIBing, the table of contents is correctly constructed.

Instead of editing the common file to set switches before MSCRIBing each different version, it is suggested that the different versions have separate files consisting of all the switch settings and a linkage to the common file. For example, suppose the file BASIC/TXT serves as the common file for SALES/TXT and CUSTOMER/TXT. The switches 240 and 25 enable printing of information intended only for the company salesman. Switches 2 and 195 enable general information important to customers but not needed by salesmen to be printed.

```
SALES/TXT
+MS240+MS25
+D1BASIC/TXT+F1
```

CUSTOMER/TXT  
+MS2+MS195  
+D1BASIC/TXT+F1

When SALES is MSCRIBEd, SALES/MSP will contain the version of BASIC/TXT relevant to the salesman. MSCRIBing CUSTOMER produces CUSTOMER/MSP, the version designed for the customers.

## CHAPTER 7. INDEX

MSCRIBE generates page references for keywords and phrases listed in a /KEY file if an "X" is entered as a parameter on the command line and if the text contains the index flags: +M<,+M>,+MB and +MK, marking those keywords and key phrases. MSCRIBE also requires either FASTSORT or the DOS SORT utility to generate the /NXP file when the "X" option is selected. The special index flag commands may be entered during EDITing of the file as MSCRIBE commands, or added by the MSINDEX program. (A description of MSINDEX is given in the next chapter).

MSCRIBE scans the /KEY file and the flagged words and phrases in the text file to build the /NXP file from the references to all flagged words and phrases listed in the /KEY file. The /KEY file also serves as a "model" for the final formatting of the index. The keywords appear in the index exactly as they appear in the /KEY file, indentions and cases included (see the section "Keyword File"). The /NXP file contains the page numbers for each reference along with all the necessary SCRIBE commands for proper formatting. The MSCRIBE command +MX in the text file produces the SCRIBE commands for linkage with the /NXP index file during DSCRIBing.

Keyword scanning begins after the first +M7 command is encountered and continues up to the first appendix. Appendices are not referenced in the index. Keywords in chapter or section headings are also not referenced.

The following diagram illustrates the MSCRIBE "X" option:

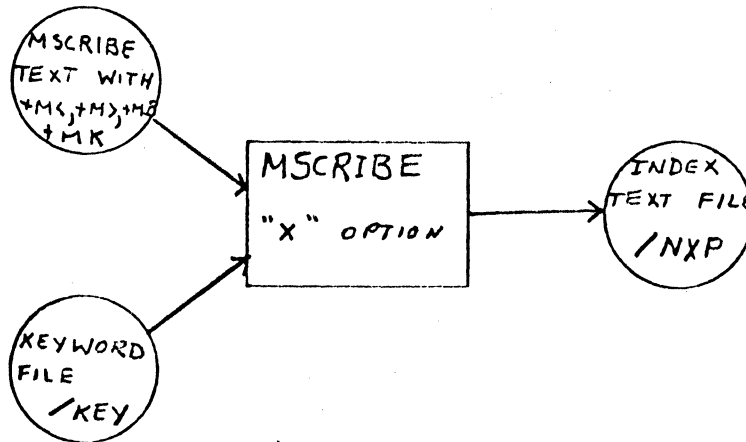


Figure 1. Index Built with MSCRIBE

## 7.1 MSCRIBE Commands for Indexing

The commands: +M<,+M>,+MK,+MB, are the MSCRIBE commands flagging the words and phrases that are to appear in the index. These commands may be entered during generation of the original document, inserted using MSINDEX (see the following chapter), or included along with the addition of a sentence or paragraph during text revision.

### 7.1.1 The +MX Command

The +mx command should be the last command in the text file if an index is to be included in the manual. This command generates the SCRIBE commands to link to the index file.

Pseudo-SCRIBE text:

+mx

SCRIBE text output:

```
+PG
+D2<filename>/NXP+PB*****+F2
+NH+PG
```

### 7.1.2 The +M< Command

The +M< command informs MSCRIBE that the following reference is to be listed in the index if it appears in the keyword file <filename>/KEY. Words and phrases which are preceded by +M< but are not listed in the keyword file are ignored. Leading punctuation marks:

" ( { [ < and '

are ignored during the scanning of both the /KEY file and the text. SCRIBE commands (except +SPnn) embedded in the phrase in the text are also ignored. Except in the conditions mentioned above, all phrases included within the brackets must match identically with the keyword phrase entry in the keyword file (including spaces and punctuation) in order to generate a reference. The maximum length of the keyword/phrase is 63 characters including spaces.

### 7.1.3 The +M> Command

The +M> command terminates the keyword reference. Examples of references are given below:

```
+M<keyword+M>
+M<this is a key phrase+M>
```

### 7.1.4 The +MK Command

The +MK command informs MSCRIBE that the following word is to be listed in the index if it appears in the keyword file <filename>/KEY. Words which are preceded with +MK but not listed in the keyword file are ignored. The +MK command has the same effect as +M< except that a space or punctuation character terminates the reference rather than the +M>.

### 7.1.5 The +MB Command

The +MB command precedes the +M< or +MK command and indicates that the reference to the keyword which follows should be printed in boldface in the index. If the +MB command is not followed by a +M< or +MK command, it is ignored. Examples:

```
+MB+M<boldface the reference to this key phrase+M>  
+MB+MK keyword
```

### 7.2 Keyword File

The list of words and phrases that are to be indexed should be EDITED in a file with extension /KEY. The filename must be the same as the file on the MSCRIBE command line. If no /KEY file exists when MSCRIBE tries to index, the message:

```
NO KEY FILE
```

will be displayed.

The /KEY file should be a "model" of the final index. That is, words and phrases should be listed exactly in the order and in the case in which they are to appear in the final index. Comments and headings are indicated with the tilde character (see the section "'~' Character"). Entries should also be indented as desired.

Each word or phrase should be entered on a separate line. Only the first 63 characters are transferred to the resulting index file. A keyword is terminated by an end-of-line. Note that key phrases beginning with a word also listed as a key word should precede the single key word. Comments that do not appear in the index may be included in the file by inserting a period in column one.

#### 7.2.1 Keyword Character Restrictions

Any character (alphabetic, numeric or special) may be a character in a keyword with the following exceptions:

- 1) A keyword which has a '+' will be referenced properly; however, SCRIBE errors will occur unless the index file is edited to change the '+' to '++'.

- 2) The character ~ has special meaning (see below).
- 3) The character # has a special meaning (see below).
- 4) The character period (.) in the first column of the keyword indicates a comment and will be ignored by MSCRIBE.
- 5) The leading punctuation: "'([< of a keyword is ignored.
- 6) A keyword may not be matched if it ends with " ' } ] > ! : ; ? ' or ,.

### 7.2.2 The ~ Character

The ~ character is used in the keyword file to include a reference for any word in the text that matches the keyword up until the ~. For example, if it is desired to get references for "translate", "translator", "translation" and "translating", the keyword "translat~" will produce references for all the above forms of the word. This can be very useful for keywords and their plurals.

Text following a '~' in the /KEY file is not included in the search; however, it does appear in the final index. Thus, in the example above, the entry "translat~ion" would probably appear in the key file so that references to "translation" and "translating" all appear under the entry "translation". In other words, follow the '~' with the characters that should be EDITed into the tilde's place in the final index.

The '~' character is also useful for "(see also tables)" or other such comments that are to be included following the keyword in the final index. The '~' may be entered in the first column to indicate a heading to be included in the index. This differs from the '.' comment since the '.' comment indicates text that is NOT included in the /NXP file.

Unless the tilde appears in the first column, it must be preceded by a non-blank character, for example:

Pick-ups~ (see also "trucks")



### 7.2.3 Keyword Case

Keywords should be entered as they are to appear in the manual index. It makes no difference if they are entered in upper, lower, or mixed (e.g. first character capitalized) case. It also makes no difference how the keywords appear in the text; MSCRIBE considers everything (the keyword and the text) to be in upper case to hunt for matching text (see the next subsection for the only exception to this rule). If the user wishes some entries in the index to be indented, he may insert blanks ahead of the keyword. Since the keyword is printed in the index as it appears in the keyword file, indentation will occur in the final index as well. All references on subsequent lines will be indented four characters more than the initial reference line.

### 7.2.4 The # Character

If the user wishes to index only references in a particular format (example: all upper case) the desired keyword or phrase should be preceded by a pound sign (#) in column 1. This indicates that only text references which match exactly will be generated. To search for a pound sign, include two pound signs. Example:

```
#ADD
##34
# indent this phrase EXACTLY matched
```

In the first example all references to "add" are ignored while all references to "ADD" are generated. In the second example all references to #34 are generated.

### 7.2.5 Sample Keyword File

```
. This is a comment that is a reminder that the
. following keyword file is used when the "sales" switch
. (switch 2) is set. This comment does not appear in
. the index.
~benefits, employee
  credit union
  medical and insurance plan
#MONEY Club
~government agencies
  FICA
    employee contributions
```

```
        employer contributions
    IRS~ (see also "reporting")
    OSHA
JOHN      DOE      COMPANY
reporting
A. B. Smith & D. E. Jones
$55.95
. End of keywords for "sales" version
```

### 7.2.6 Number of Keywords

The "X" parameter on the command line will cause the following to be displayed:

```
INDEX WILL BE IN <filename>/NXP
nnn KEYWORDS MAY BE REFERENCED
```

where nnn may be up to 255 depending on processor memory size. This number represents the maximum number of keywords that may be indexed at one time on that processor. If the manual has more than 255 keywords, divide the /KEY file into smaller files, MSCRIBE the manual with the "XO" option, rename the /NXP file and MSCRIBE again using the second /KEY file. BLOKEDIT the renamed /NXP file and the new /NXP file for a complete index.

### 7.2.7 SORTing the Keyword File

It may be convenient to use the DOS SORT/CMD to arrange the keywords in alphabetic order. This is not necessary, the keywords appear in the manual in the order they appear in the /KEY file. If the keywords are to be SORTed, they should be edited into a file with a name other than the final /KEY file name.

```
SORT <filename>/TXT,<filename>/KEY;1-16
```

(See the DOS User's Guide for details on the SORT command and for changing the collating sequence if a sequencing other than ASCII is necessary.)

### 7.3 The /NXP File

MSCRIBing with the "X" option builds the <filename>/NXP index file where <filename> is the name on the MSCRIBE command line. The keywords or phrases in the keyword file are matched against words containing +MK or +M< delimiters in the text file. Several references to a word on the same page will result in a single reference in the index. A word that is not referenced at all will not appear in the index. The /NXP file is an ordinary SCRIBE file so it may be edited to delete insignificant references.

The maximum number of pages that may be referenced in a manual is 65535. However, the most pages which may be referenced in a chapter is 256.

Sample /NXP File:

```
+cn+bfINDEX+be+lm4+s12+tc+ts1+lj
+nl+ps2+tb
+SP1 benefits, employee +LM5 +sp2
+nl+ps2+tb
+SP6 credit union +LM10+sp2
1-1, 2-1, 2-2, 2-3, 3-1, 4-2, 4-3, 4-4+nl+ps2+tb
+SP6 medical and insurance plan +LM10+sp2
1-1, 1-4, 1-5, 1-6, 2-3, 2-5, 3-7, 5-2+nl+ps2+tb
+SP6 MONEY Club +LM10+sp2
1-3, 1-5, 2-3, 3-2, 4-1, 4-5, 5-3+nl+ps2+tb
+SP1 government agencies +LM5 +sp2
+nl+ps2+tb
+SP6 FICA +LM10+sp2
1-1, 1-3, 1-4, 1-5, 2-1, 2-2, 2-3, 2-5, 2-7, 2-8, 3-10, 3-11, 3-12+nl+ps2+tb
+SP11employee contributions +LM15+sp2
1-1, 1-3, 1-4, 2-1, 2-2, 2-3, 2-5, 3-10, 3-11+nl+ps2+tb
+SP11employer contributions +LM15+sp2
1-1, 1-5, 2-7, 2-8, 3-11, 3-12+nl+ps2+tb
+SP6 IRS (see also "reporting") +LM10+sp2
1-1, 4-3, 4-5, 5-1, 5-2+nl+ps2+tb
+SP6 OSHA +LM10+sp2
1-1, 2-3+nl+ps2+tb
+SP1 J O H N+SP5D O E+SP5C O M P A N Y +LM5 +sp2
1-1, 4-2, 4-3, 5-1+nl+ps2+tb
+SP1 reporting +LM5 +sp2
1-1, 3-2, 4-2, 5-1+nl+ps2+tb
+SP1 A. B. Smith & D. E. Jones +LM5 +sp2
1-1, 2-3, 2-4, 3-1, 3-2, 4-1+nl+ps2+tb
+SP1 $55.95 +LM5 +sp2
1-1, 2-3, 2-5+nl+ps2+tb
+tc+rm66+fr
```

Sample Index: INDEX

benefits, employee  
    credit union 1-1, 2-1, 2-2, 2-3, 3-1, 4-2, 4-3, 4-4  
    medical and insurance plan 1-1, 1-4, 1-5, 1-6, 2-3, 2-5,  
        3-7, 5-2  
    MONEY Club 1-3, 1-5, 2-3, 3-2, 4-1, 4-5, 5-3  
government agencies  
    FICA 1-1, 1-3, 1-4, 1-5, 2-1, 2-2, 2-3, 2-5, 2-7, 2-8,  
        3-10, 3-11, 3-12  
        employee contributions 1-1, 1-3, 1-4, 2-1, 2-2, 2-3,  
            2-5, 3-10, 3-11  
        employer contributions 1-1, 1-5, 2-7, 2-8, 3-11, 3-12  
    IRS (see also "reporting") 1-1, 4-3, 4-5, 5-1, 5-2  
    OSHA 1-1, 2-3  
J O H N D O E C O M P A N Y 1-1, 4-2, 4-3, 5-1  
reporting 1-1, 3-2, 4-2, 5-1  
A. B. Smith & D. E. Jones 1-1, 2-3, 2-4, 3-1, 3-2, 4-1  
\$55.95 1-1, 2-3, 2-5

## CHAPTER 8. MSINDEX

MSINDEX contains two facilities which help the user in generating an index. Using a keyword file and MSCRIBE text file(s) as input, MSINDEX inserts +M< and +M> commands into the MSCRIBE text file for all or selected references to keywords. The second facility uses the MSCRIBE file(s) containing +M<,+M>, +MK and +MB commands to generate a keyword file which is sorted alphabetically, in upper case, and possibly containing SCRIBE commands.

### 8.1 MSINDEX Command Line and Options

The MSINDEX command line is entered as follows:

```
MSINDEX <filename1>[/ext][:drn][,<filename2>[/ext][:drn]
;[D][S][O][A]
```

where square bracketed items are optional.

filename1 - indicates the first MSCRIBE text file with the default extension of /TXT. Note that the DSCRIBE command for linking files together is supported in MSINDEX.

filename2 - indicates the keyword file with the default extension of /KEY. If <filename2> is not given, <filename1>/KEY will be used.

Note that at least one of the following options: D, S or A must be provided on the command line.

#### 8.1.1 A Option

If the A option is given, MSINDEX scans the MSCRIBE text file(s) and places MSCRIBE index initiators (+M<) and MSCRIBE index terminators (+M>) around all references to each entry in the keyword file. However, all references included within "AS IS" text are bypassed. All references are flagged using the +M< and +M> MSCRIBE commands, however, only one entry in the printed index is generated for each page. The only SCRIBE command that is expanded when comparing the text with the keyword is the +SP. All other commands and any spaces following commands are discarded before comparing with the keyword. MSINDEX links to any subsequent files referenced with a +D1<next file>+F1 command.

Each processed MSCRIBE text file overwrites the original file with the newly flagged text when the +D1<next file>+F1 command is encountered. Figure 2 shows this process.

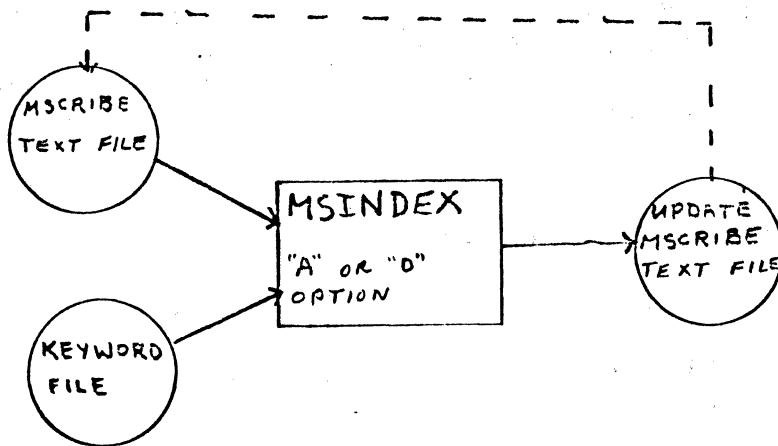


Figure 2. A option or D option chosen.

### 8.1.2 The D Option

If the D option is selected, the same process occurs as with 'A' option except the user interacts with the program to select the references to contain MSCRIBE index initiators (+M<) and MSCRIBE index terminators (+M>). Any references in "AS IS" text are bypassed. Additionally, the user may specify that certain references are to be boldfaced in the resulting index. When the D option is selected the program compares the keyword file with the text file. The only SCRIBE command that is expanded when comparing text with keyword is the +SP command. All other commands and any spaces following the commands are discarded. All references already flagged with +M< and +M> are ignored. When a match is found, the following message appears on the screen:

FOUND KEYWORD <word>  
is the line in the text which contains <word>. It  
INDEX?

The cursor flashes in the position following the question mark. If the user does not wish to include this reference in the index, he should enter "N"; the program will continue to scan for additional references. If the user does wish to include this reference in the index, he should enter "Y" or "B". If he enters "Y", the current reference is entered into the index. If he enters "B", the current reference will appear boldfaced in the index. All selected references are flagged with the +M<,+M> and +MB MSCRIBE commands, however only one reference is generated in the index for each page.

### 8.1.3 The S Option

If the S option is selected, the program scans an MSCRIBE text file containing the +MK, +M<, and +M> commands and generates a keyword file. This file contains all generated keywords in upper case and is sorted in alphabetical order. FASTSORT or the DOS SORT utility must be present on the disk for the "S" option to execute. If SORT is not present, the unsorted keyword file is left in SCRATCH/TXT. Any changes to the keyword file may be made using the DOS EDIT command. If no extension is given /KEY is used. If no filename2 is given, filename1 will be used. Figure 3 shows this process.

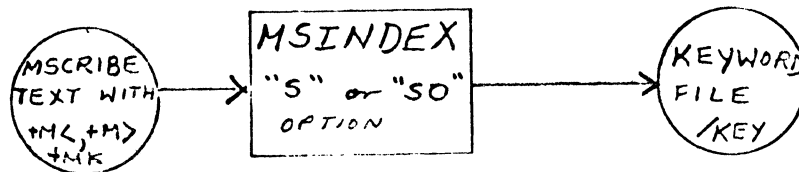


Figure 3. S option chosen.

### 8.1.4 The O Option

The O option is used in conjunction with the S option when building the keyword file. If the O option is selected and the keyword file exists, it is overwritten with the new key word file. If the keyword file exists and the O option was not selected, the program asks:

KEYWORD FILE EXISTS. OVERWRITE? (Y or N)

If the operator enters "Y", the file is overwritten. If he enters "N", the program execution is aborted.

### 8.2 Keyword File

When the A option or the D option is selected, the keyword file is matched with the text file. When a match is found in the keyword file, the reference is flagged and the next text word is processed. In order to have phrases flagged which contain keywords, the key-phrases should appear ahead of the keywords in the keyword file. The following rules apply to the MSINDEX keyword file:

1. If the text file contains plus characters, they are indicated by '++'. It is necessary for the keyword to also contain two pluses if a match is to be found.
2. The keyword file may also contain the forcing character in the first column as in MSCRIBE (see The # Character in Chapter 7).
3. Additionally, the tilde facility explained in Chapter 7 is available in MSINDEX.
4. A period in column one of the keyword indicates that the current line is a comment and is to be ignored as a keyword.
5. The keyword may not begin or end with the following characters:

" ' ( { [ < . , ) } ] > ! : ; ?

Ordinarily the same /KEY file can be used for both MSCRIBE and MSINDEX. In some cases, however, it may be preferable to have different keyword files for MSINDEX and MSCRIBE.



## 8.3 Informative Displays and Error Messages

### 8.3.1 Informative Displays

MSINDEX identifies itself as:

```
INDEX PRE-PROCESSOR   n.m date
```

with the version and date.

MSINDEX give the following message if the D option is selected:

```
<filename1/ext> BEING UPDATED
```

to remind the user that the updated MSCRIBE text file will overwrite the existing text file. MSINDEX gives the following message if only the S option was selected, no filename2 was given and filename1/KEY already exists:

```
KEYWORD FILE EXISTS. OVERWRITE? (Y OR N)
```

### 8.3.2 Error Messages

MSINDEX display the following messages:

```
FILE1 NOT FOUND
```

This message indicates that either no text file name was specified on the MSINDEX command line or no file with the name given could be found. The program then returns to DOS.

```
KEYWORD FILE NOT FOUND
```

This message indicates that the keyword file does not exist on an online disk and the A or D option was selected. The program then returns to DOS.

```
<filename> NOT FOUND  
FROM FILE <filename>
```

This message indicates that an attempt was made to link to a non-existent file using the +D1 or +D2 DSCRIBE command.

MSINDEX displays the following message if the S option is

selected but DOS SORT is not present on an online disk:

SORT MISSING!

The unsorted keyword file is left in SCRATCH/TXT. Execution is aborted.

MSINDEX displays the following message:

FILENAME REQUIRED

if no filename is given on the command line. The program then returns to DOS.

MSINDEX displays the following message:

BAD OPTION PARAMETER!! VALID OPTIONS: D,S,SO,A

if an invalid option or no option is entered on the command line. The program then returns to DOS.

MSINDEX displays the following message:

MSINDEX ENDED

whenever any fatal error occurs before returning to DOS or when execution is completed.

## APPENDIX A. MSCRIBE COMMAND LIST

+MSnnn	Turn ON MSCRIBE switch nnn
+MTnnn	Turn OFF MSCRIBE switch nnn
+MPnnn	Process text following only if MSCRIBE switch nnn is ON
+NP	Turn off print suppression
+ME	Even Margins for the Entire Manual
+M1	Title Page Manual Title
+M2	Title Page Subtitle
+M3	Title Page Date
+M4	Other Title Page Identification (up to four +M4 commands)
+M5	Preface Format
+M6	Table of Contents Linkage
+M7	Chapter Format
+M8	Section Format
+M9	Appendix Format
+MVnn	Volume Initialization
+MX	Index Linkage
+M<	Keyword to Index Initiator
+M>	Keyword to Index Terminator
+MB	Next Index Reference Boldface
+MK	Keyword Indicator

## APPENDIX B. USABLE SCRIBE COMMANDS

+AS	"As is" text
+ATnnn	Absolute tab to column nnn
+BE	Boldface end
+BF	Begin boldface
+BR	Black ribbon
+CN	Center output text
+D1	Open the next file to be processed
+EM	Even margins
+F1	Switch to next file control
+JR	Right justify at current column
+LJ	Left justify output text
+LT	Set left margin to tab
+LMnnn	Set left margin to column nnn
+NE	Print current text even margins
+NL	Print current text and begin new line
+NR	End field right justification
+NS	No super/subscripting
+NU	No underlining
+OP	Overprint
+PL	Purge line
+PPnnn	Skip nnn lines and begin new paragraph
+PSnnn	Page skip if within nnn lines of the bottom
+RJ	Right justify
+RMnnn	Set right margin to column nnn
+RR	Red ribbon
+RT	Set right margin to tab
+SB	Subscript
+SLnnn	Skip nnn lines or to new page
+SPnnn	Skip nnn spaces
+SS	Superscript
+SUnnn	Skip until nnn lines left on the page
+TB	Tabulate
+TC	Tab clear
+TM	Tab to left margin
+TR	Tabulate and right justify field
+TS	Tab set
+TT	Typewriter tab
+TX	Tab extended
+UN	Underline
+##	End of "as is" text

## APPENDIX C. MSCRIBE/KEY

The following is the /KEY file used to create the index for this User's Guide.

```
appendi~ces
chapter~
command line
error message~s
even margins
index~
keyword~
Keyword special characters
    pound sign~ (#)
    tilde~ (~)
~MSCRIBE commands
    +ms~
    +mt~
    +mp~
    +np
    +m1
    +m2
    +m3
    +m4
    +m5
    +m6
    +m7
    +m8
    +m9
    +me
    +mv
    +mx
    +m<
    +m>
    +mb
    +mk
~MSCRIBE files
    /KEY
    /MSP
    /TCP
    /NXP
~MSCRIBE options
    C option
    O option
    X option
```

~MSINDEX options

A option

D option

S option

O option

preface

print suppression

SCRIBE commands

section~s

subsection~s

switch~es

table of contents

title page

## APPENDIX D. MSCRIBE USER'S GUIDE TEXT FILE

The following is a partial listing of the text of this file before MSCRIBE processing. The file was used as the common text for this released version of the manual and a special DATAPOINT in-house version of the User's Guide to describe DATAPOINT's manual standards. MSCRIBE switch +MS1 is set to output the released version; +MS2 enables the in-house version. The +MN and +MR are special commands for use in DATAPOINT documents. The listing of this text is produced by the +AS command.

+m1 technical manual pre-processor

+m2 mscribe/msindex

+mp1+m3 User's Guide+np

+mp2+m3 In-house User's Guide+np

+mr 2

+m4 November, 1977

+mp1+mn XXXXX+np

+mc

+m5

The Technical Manual Pre-processor and Table of Contents/Index Generator is designed

to simplify and standardize the writing of technical manuals. Using EDIT/CMD, the technical material is entered along with the few MSCRIBE commands and a small subset of SCRIBE commands into a disk file. MSCRIBE translates this pseudo-SCRIBE file to a SCRIBE file in the standard manual format and optionally creates a table of contents and/or an index.

A print suppression capability, as in SCRIBE, allows different manuals to be generated from a common text.

A companion program (MSINDEX) is released with MSCRIBE to simplify the generation of an index.

+m6

+m7 1. Differences from Version 1

The two differences between MSCRIBE Version 1 and Version 2 concern the boldfaced headings and the generation and creation of the index.

+pp1

Since the final copy of the manual is usually printed on a Servo printer, the special headings are now boldfaced. The special headings now boldfaced include:

+tc+ts10

+sl1+tb Title

+mp2+nl+tb Program Name +np

+nl+tb "PREFACE"

+nl+tb "TABLE OF CONTENTS"

+nl+tb Chapter Titles  
+nl+tb Section Titles  
+nl+tb Appendix Titles  
+nl+tb "INDEX"  
+nl+tb Definition References (see chapter "MSINDEX")

+pp1

The most significant difference between the old and new versions of MSCRIBE is in index generation. There were several problems concerning index generation with Version 1. Key phrases had to be indexed by using a unique keyword and then editing the /NXP file to contain the entire phrase.

Changes made to a chapter forced re-creation of the index - often with the tedious task of answering "Yes"/"No" to all the references of keywords in the new chapter, then EDITing the new page numbers into the existing index.

A mistakenly KILLED /NXP file meant re-creation of the entire index!

Even an /NXP file with correct page numbers often required EDITing to remove tildes, add comments and indent entries.

+pp1

The creation of an index has actually two steps. First, the originator of the manual needs to indicate what references in the text are to be included in the index. Unless all references are desired, these decisions MUST be made by the author. The second step is the actual creation of the /NXP file with the page numbers for the references. This second step should be a totally automatic procedure with no final editing required.

+pp1

MSCRIBE Version 2, along with the companion program MSINDEX, provides an enhanced method of index generation. MSINDEX aids the author in the first step, the "marking" of important references. MSCRIBE uses the text marked by MSINDEX to produce a completely formatted, final version of the index. Changes may now be made to the original text (additions marked for the index "by hand" if desired) and NOT force "re-marking" of the entire text. Reference "marking" is now a one-time step, with the /NXP file generation an automatic procedure which may easily be repeated with each modification made to the text.

+pp1

The features of the new method of index generation include:

+lm7+tc+ts5+s11

+tb\*+tm Key phrases as well as key words referenced

+s11+tb \*+tm Option to reference all occurrences of key words and phrases

+s11+tb \*+tm "Display" option to allow the author to determine significant references

+s11+tb \*+tm Facility to mark some references as "definition" references that are boldfaced in the final index

+s11+tb \*+tm A "forcing" character to reference only the key words or phrases that EXACTLY match

+s11+tb \*+tm Option to build a sorted key file from a text previously "marked"

+s11+tb \*+tm A "finished" /NXP file correctly formatted so that no editing for indentation or deletion of characters need occur

+s11+tb \*+tm Increased limit of 256 indexed pages per chapter



+lm1

+pp1 See the chapters "INDEX" and "MSINDEX" for more detailed information.

+m7 2. Introduction

MSCRIBE allows the user to create standardized manuals by using a minimum of SCRIBE commands and the +mp1nineteen +np+mp2twenty-one +np MSCRIBE commands

The MSCRIBE output file contains, in place of the MSCRIBE commands, the necessary SCRIBE commands for setting up chapter headings, page numbers, etc., according to the predetermined defaults for writing manuals. These defaults include:

+lm5+sl1

+tm margins at 1 and 66 (which are reset at every chapter)+nl

+tm page numbers and footings alternately printed in the lower+nl+tm+sp4 right and left hand corners of the page+nl

+tm pagragraph indention of 5 spaces+nl

+tm header length of 8 lines, body length of 48 lines and footer length of 10

+lm1+sl1

The MSCRIBE generated table of contents has uniform spacing of titles of chapters, sections, subsections and appendices, and MSCRIBE converts all chapter and appendix titles to upper case in the output SCRIBE file and in the table of contents.

+pp1

Most of the MSCRIBE commands are for "one-time" initialization and title page preparation. Only six of these commands are needed for the body of the manual so that MSCRIBE is very easy to learn. For example, the body of a manual with "straight text" can be transformed into a standard format using only one MSCRIBE command: ++M7 (signifying the beginning of a chapter) and one SCRIBE command: ++PP (denoting a new paragraph). An unsophisticated SCRIBE user can produce a standard technical manual and need not learn more than a few SCRIBE commands.

+pp1

In fact, MSCRIBE allows only +mp1forty +np+mp2forty-one +np of the hundred-odd SCRIBE commands to insure consistency of the manuals. SCRIBE commands such as ++BH (begin header), ++BLnnn (adjust body length), ++ALnnn (adjust the left footing margin), etc. are ignored so that the MSCRIBE manuals have uniformed body length, alternate left and right pagination, consistent footings and identical chapter formatting. See the appendix, "USABLE SCRIBE COMMANDS", for a complete list of allowable commands. Note that MSCRIBE commands may be entered in either upper case or lower case.

+pp1

MSCRIBE translates the "pseudo-SCRIBE" text disk file into a second "standard" SCRIBE disk file. This "standard" SCRIBE disk file may be EDITED to modify the SCRIBE commands that MSCRIBE produces or to add any SCRIBE commands the user finds he needs to adapt the manuals to his particular standards. The SCRIBE file may then be processed by DSCRIBE to list on the screen for visual proofing and then print a paper copy on a local, servo or remote printer or a selectric typewriter.

+m8 2.1 MSCRIBE Command Line and Options

The MSCRIBE command line is entered as follows:

+tc+ts5

+s11+tb MSCRIBE <filename>[/ext][:drn];[C][X][O]

+s11 where square-bracketed items are optional.

+pp1

The command: +s11+tb MSCRIBE MANUAL/CH1

+s11 causes MSCRIBE to process the text disk file MANUAL/CH1 to create a file MANUAL/MSP to be used as input to DSCRIBE. If no extension appears on the command line, the text disk file is assumed to have the extension /TXT.

All drives are searched if no drive is specified.

+pp1

The extension of the output file of MSCRIBE is always /MSP. Beginning with drive zero, MSCRIBE looks for a file called <name>/MSP to overwrite with the new MSCRIBED text. If no file with that name exists, the file <name>/MSP is created on the first available drive.+sp2 To direct a new /MSP file to a certain drive, EDIT a null file called <name>/MSP on the desired drive and MSCRIBE will overwrite the null file.

+m8 2.2.1 The C Option

The option, C, on the command line indicates that a table of contents should also be built. If this option is entered, MSCRIBE will build a text disk file with the extension /TCP that contains the table of contents and has the correct SCRIBE commands to link to the /MSP file during DSCRIBING.+sp2 A "click" occurs as each chapter, section, subsection and appendix is entered into the table of contents.+sp2 The /TCP file is placed on drive zero unless a file by that name already exists on another drive (as with the /MSP file).

+s11+tb MSCRIBE MANUAL;C

+s11 processes disk file MANUAL/TXT creating MANUAL/TCP and MANUAL/MSP.

+m8 2.2.2 The X Option

The option, X, on the command line indicates that an index file as well as the /MSP file should be created. MSCRIBE expects the existence of a file called <name>/KEY when this option is entered. See the chapter on "INDEX" for the details of the construction of the /KEY file.

+s11+tb MSCRIBE PART1/MAN;X

+s11 will convert disk file PART1/MAN to a SCRIBE file PART1/MSP. MSCRIBE expects PART1/KEY to exist to help in the creation of the index file PART1/NXP. As above, all new files are placed on drive zero. An additional program is released with MSCRIBE to facilitate the generation of an index. This program, MSINDEX, is described in the chapter on "MSINDEX".

+m8 2.2.3 The O Option

The "O" option must be specified in conjunction with the C option and/or the X option. It signifies that either the table of contents or the index or both files are to be created +unwithout +nu rewriting the /MSP file.

+m8 2.2 Error Messages and Informative Displays

+tc+ts12

MSCRIBE identifies itself as:

```

+mp1+s11+tb TECHNICAL MANUAL PRE-PROCESSOR +np
+mp2+s11+tb TECHNICAL MANUAL PRE-PROCESSOR IN-HOUSE+np
+s11with the version and date.
+pp1 MSCRIBE also reminds the user that:
+s11+tb THE TABLE OF CONTENTS WILL BE IN <name> /TCP
+s11 if the C option is entered on the command line.
+pp1 An X on the command line produces the following display:
+s11+tb INDEX FILE WILL BE IN <name>/NXP
+nl+tb nnn KEYWORDS MAY BE INDEXED
+s11 where nnn may range from 100 to 255 depending on the processor memory
size. (See chapters on "INDEX" and "MSINDEX".)
+pp1 If no filename appears on the MSCRIBE command line, the message:
+s11+tb NAME REQUIRED
+s11 is displayed.
+s11+tb INVALID DRIVE
+s11 signifies that the drive number is not in standard form or that
it is out of range.
+pp1
If the filename is in the correct form on the command line but no
file of that name exists on on-line drives, a message appears that:
+s11+tb FILE NOT FOUND.
+pp1
Any characters other than "C", "O", or "X" entered following the semi-colon
produces:
+rm75+s11
+AT5 BAD OPTION PARAMETER!!! VALID OPTIONS ARE C, O, AND X!
+rm60+s11+at5MSCRIBE ENDED.
+pp1 "O" may not be the only option entered:
+s11+tb MUST SPECIFY "C" OR "X" OR BOTH WITH "O"
+pp1 If MSCRIBE encounters any errors or illegal
commands, the message:
+s11+tb COMMAND ERROR ++QQ IN LINE nnn OF <name>/TXT
+nl+tb ++qq This was supposed to be a new paragraph.
+s11 is displayed, where the second line is the incorrect line in the
text file.
+pp1Also, the string
+s11
"++SL1 COMMAND ERROR ++++QQ ++SL1"
+s11
will be included in the /MSP file so that when the file is DSCRIBEd errors
may easily be found in the listing.
+pp1 The warning that:
+s11+tb MSCRIBE COMMAND ++Mn IS OUT OF SEQUENCE
+s11 may appear during the writing of the /MSP file if one of the MSCRIBE
commands ++M1,...,++M7 were omitted.
+pp1 The message:
+s11+tb <filename1 ext> NOT FOUND.
+nl+tb IN LINE nnn OF <filename2>

```

+s11 means that  
no <filename1>  
existed to open by the ++D1<filename1> ++F1 command in  
<filename2>.

+s11 Several error messages may occur if the "X" option is selected:  
+s11+tb NO KEY FILE  
+s11+tb TOO MANY WORDS IN KEY FILE  
+s11 These messages are explained in the chapter on "INDEX".

+m7 3. Manual initialization  
The MSCRIBE commands ++M1 through ++M6 concern the title page, the preface  
and the table of contents.

+m8 3.1 Title Page  
MSCRIBE commands ++M1, ++M2, ++M3+mp1 and ++M4 format the title page. +np  
+mp2, ++MR, ++M4, ++MN, and ++MC format the title page. +np  
Everything following a ++M1 up to the next command or end-of-line is  
considered to be the manual title. The title that is entered here appears in  
the left footing of every even page within each chapter. MSCRIBE  
converts the title to upper case regardless of the way it appears in the text  
file. The horizontal spacing of the title follows the SCRIBE convention  
(more than one space between words is not permitted); however, in the  
footing, the title appears "as is" in regards to horizontal spacing. For  
example,  
+mp1+s11+tb ++m1 Monthly+sp10Report+np  
+mp2+s11+tb ++m1 Manual+sp10SCRIBE+np  
+s11 appears as:  
+mp1+s11+cn MONTHLY REPORT+np  
+mp2+s11+cn MANUAL SCRIBE+np  
+s11+lj on the title page but appears as:  
+mp1+s11+tb 1-2 MONTHLY+sp10REPORT+np  
+mp2+s11+tb 1-2 MANUAL+sp10SCRIBE+np  
+s11in the left-hand footings.

+pp1  
+mp1++M2 is followed by a subtitle which is not converted to upper case. +np  
+mp2++M2 is followed by the program name which is converted to upper  
case. The manual type may be entered using ++M3. ++MR is followed by  
the version number, ++M4 is followed by the date, ++MN is followed by  
the manual model code number as listed in the Software Catalog, and ++MC  
generates a "Proprietary Confidential Information" statement.

+pp1  
Each of these lines is terminated in the pseudo-SCRIBE text by the  
end-of-line or by another command. The first five commands are required  
in the above sequence. Commands ++MN and ++MC are optional. The ++MC  
command, if included, must come between ++M4 and ++M5. The cover page  
has the above six items right-justified in the upper right-hand  
corner of the page. The title and the "Proprietary Confidential Information"  
statement also generates page headings referencing the statement on the title  
page.

+s11EXAMPLE:

```

+ps8
+tc+ts5+ts10
+nl+tbPseudo-SCRIBE Text:
+nl+tb+tb++m1manual scribe
+nl+tb+tb++m2mscribe
+nl+tb+tb++m3In-house User's Guide
+nl+tb+tb++mr 3
+nl+tb+tb ++m4 March, 1976
+nl+tb+tb ++mn XXXXX
+ps9+s11+tbSCRIBE Text Output:
+nl+tb+tb ++MS++BL48++PN++PC
+nl+tb+tb++IS5++LM1++RM66++AL1++AR66++RJ++BF++NL
+nl+tb+tb++LF MANUAL SCRIBE++NL
+nl+tb+tb MSCRIBE++BE++SL3
+nl+tb+tb In-house User's Guide++NL
+nl+tb+tb++SL2
+nl+tb+tb Version 3++SL2
+nl+tb+tb March, 1976++SL3
+nl+tb+tb Model Code No. XXXXX++BE++SL3
+nl+tb+tb++NL++CN CONFIDENTIAL PROPRIETARY INFORMATION++NL++LS1++EM++PP1
+lm10+nlThis item is the property of DATAPOINT Corporation, San
Antonio, Texas, and contains confidential and trade
secret information. This item may not be transferred
from the custody or control of DATAPOINT except as authorized by
DATAPOINT and then only by way of loan for limited
purposes. It must be returned to DATAPOINT upon
request, and in all events, upon completion of the
purpose of the loan.++pp1 Neither this item nor the
information it contains may be used or disclosed to
persons not having a need for such use or disclosure
consistent with the purpose of the loan, without
the prior written consent of DATAPOINT.++LS2++NL++LJ
+nl
++bh DATAPOINT CONFIDENTIAL INFORMATION -- SEE TITLE PAGE.
+lm1+np
+mp1
The date may be entered using ++M3. Up to four ++M4 commands may be
entered to print out the author, the department, the company and other
identification. As in the ++M1 command, each line is considered terminated at
the next command or the end-of-line.
+s11EXAMPLE:
+ps8
+tc+ts5+ts10
+nl+tbPseudo-SCRIBE Text:
+nl+tb+tb++m1Monthly Report
+nl+tb+Tb++m2(January)
+nl+tb+tb++m3February 1, 1978++SU4
+nl+tb+Tb++m4John Smith

```

```
+nl+tb+tb++m4Personnel Department
+nl+tb+tb++m4The Company
+nl+tb+tb++m4Anywhere, USA
+ps9+s11+tbSCRIBE Text Output:
+nl+tb+tb++HL8++BL48++FL10++PN++PC
+nl+tb+tb++IS5++LM1++RM66++AL1++AR66++SL19++BF++CN
+nl+tb+tb++LFMONTHLY REPORT++BE++SL3
+nl+tb+tb(February)
++SL1
+nl+tb+tbFebruary 1, 1977++SU5
+nl+tb+tbJohn Smith
++NL
+nl+Tb+TbPersonnel Department
++NL
+nl+tb+TbThe Company
++NL
+nl+tb+tbAnywhere, USA
++NL
+s11 DSCRIBE will print this as:
+ps60+s119+cnMONTHLY REPORT+s13
(February)+s11
May 26, 1977+s18
John Smith+nl
Personnel Department+nl
The Company+nl
Anywhere, USA+ps60
```

```
+np
+m8 3.2 Preface
The MSCRIBE command for the Preface is ++M5. Everything between the
++M5 and ++M6 (Table of Contents) is treated as the body of the Preface.
The word "PREFACE" is centered and boldfaced at the top of the page. The body
of the Preface is double-spaced. The Preface and the Table of Contents
is numbered in lower case centered Roman numerals. The ++m5 (and
thus the Preface) may be omitted; however, MSCRIBE displays the message
that:
```

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Manual Name \_\_\_\_\_

Manual Number \_\_\_\_\_

READER'S COMMENTS

Did you find errors in this manual? If so, specify by page.

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Did you find this manual understandable, usable, and well-organized? Please make suggestions for improvement.

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