UNISYS

On-Line REPORTER III

Operations Guide

UNISYS

Product Information Announcement

○ New Release ○ Revision ● Update ○ New Mail Code

Title

On-Line REPORTER III Operations Guide

This Product Information Announcement announces the release of Update 1 to the January 1985 publication of the *On-Line REPORTER III Operations Guide*. This update is relative to the A Series Mark 4.0.2 System Software Release, dated October 1993.

This update documents enhancements to On-Line REPORTER III to process and generate COBOL85 programs. These enhancements are being made to support users migrating from V Series systems to A Series systems.

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Changes are indicated by vertical bars in the margins of the replacement pages.

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INTRODUCTION

This guide describes the capabilities of On-Line REPORTER III and explains how to use the system. This document is written to aid the first-time or occasional user of the On-Line REPORTER III language. At the same time, the guide is arranged to allow easy reference by the more experienced user. Sections 1 and 2, which describe the system and the language elements and constructs, should be read in their entirety by the first-time user. Section 3 is written to guide the user when composing the necessary On-Line REPORTER III language commands for a given application. Also, portions of Section 3 document the capabilities required for a particular application and form the starting point for specifying requests from the terminal. Section 4 contains several examples of the use of On-Line REPORTER III.

This guide serves as a reference for users on the A series and the B 1000, B 2000/B 3000/B 4000, and B 5000/B 6000/B 7000 Series of Systems. Note that, throughout this guide, instructions for A Series also pertain to B 5000/B 6000/B 7000 Series of Systems.

Certain functional differences exist in On-Line REPORTER III which are inherent to each machine. These differences are discussed in Appendices A, B, and C. Appendix D contains a list of all On-Line REPORTER III reserved words. Appendix E contains the format of the terminal backup files created by On-Line REPORTER III, as well as the format of OR3LIT. OR3LIT is the literal constant file used by On-Line REPORTER III.

The following is a list of related documents referenced in the On-Line REPORTER III guide.

1. User's Guide, REPORTER III Report Language (Relative to 2.0 Software Release), form 1177185.

2. User's Guide, REPORTER III Vocabulary Language (Relative to 2.0 Software Release), form 1177177.

3. B 1000 Systems Command AND Edit (CANDE) User's Guide, form 1090586.

3. B 4000/B 3000/B 2000 Series CANDE Reference Guide, form 1108834.

4. B 7000/B 6000 Series CANDE Reference Guide, form 5011398.

Other manuals relating to REPORTER III are:

1.   Capabilities   Manual,   REPORTER   III   (Relative   to   2.0   Software
     Release), form 1177300.

2.   Reference   Card, REPORTER III (Relative to 2.0 Software Release),
     form 1177318.

The style identification numbers for On-Line REPORTER III are B1000 OR3,
B2000/B3000/B4000 OR3, B5000/B6000/B7000 OR3, A3 OR3, and A9 OR3.

SECTION 1

SYSTEM DESCRIPTION

The On-Line REPORTER III System provides an effective on-line method for reporting information maintained on Unisys A Series and B 1000, | B 2000/B 3000/B 4000, and B 5000/B 6000/B 7000 Series of Systems. On-Line REPORTER III System and its documentation are designed with the basic premise that the user is familiar with the REPORTER III system. The user can refer to the REPORTER III Report Language Operations Guide | for more information about these systems.

SYSTEM OBJECTIVE

The objective of the On-Line REPORTER III System is to provide the user with the mechanism to interface with the REPORTER III system to create reports from a terminal without operator intervention or the use of cards. These reports can then be displayed on the terminal or printed on either a line printer or remote printer.

LANGUAGE, CAPABILITIES, AND OPERATIONS

The On-Line REPORTER III language provides a method for quickly specifying requests to the system through the use of the terminal. Because the language is free-form, English-like, and concise, little writing is necessary to input a particular request. The language provides many default features and does not require the user to specify each option.

The On-Line REPORTER III System provides three basic capabilities to:

1. Execute the REPORTER III system and generate a report program and/or produce reports.

2. Execute a REPORTER III-generated program with the ability to enter accepted data through the terminal and direct the report to terminal backup (disk) for later viewing or to the terminal screen for immediate viewing.

3. Page through a report which exists as a terminal backup file.

These capabilities are discussed in detail in Section 3. Also provided in Section 3 are instructions on how to use the previously mentioned capabilities.

The user can learn the On-Line REPORTER III system by following the instructions in the appendix appropriate to either B 1000, B 2000/B 3000/B 4000, or A Series operation and going through the self-teaching examples in Section 4. The examples in Section 4 use the vocabulary that is created by running Vocabulary Language (RP3VOC) against the vocabulary specifications included in the On-Line REPORTER III package. A data file is also included.

<u>ON-LINE REPORTER III INTERFACE</u>
<u>WITH REPORTER III SYSTEM</u>

On-Line REPORTER III interfaces with the REPORTER III System and the user through the use of a remote terminal. It allows the user to test and debug input specifications, compile and execute programs, and generate and examine reports with a minimum amount of time and effort.

A user begins communication with the On-Line REPORTER III system by executing the program OR3REP. The On-Line REPORTER III system then takes control of the user's terminal. When the user enters commands to On-Line REPORTER III, they are checked for validity. A syntactically correct command causes the specified action to be taken. If a syntax error is found, an error message is sent to the user.

On-Line REPORTER III begins execution of the REPORTER III System at one of the following three points specified by the user:

1. Phase one (see Appendix A of the REPORTER III Report Language Operations Guide) with the diagnostic specifications sent to terminal backup.

2. Phase two (report generation).

3. A previously saved COBOL query program.

Phase one or two can be suspended to allow the user to use Command AND Edit (CANDE) or another editor to correct a specifications file before continuing. On-Line REPORTER III informs the user when the report program needs accepted data and accepts it from the terminal. The generated report can be directed to terminal backup or to the terminal. On-Line REPORTER III allows the user to visually page through a report

file or the TEACH file (or other files created in the format specified in Appendix E) or to list them on the printer.

SECTION 2

LANGUAGE ELEMENTS AND CONSTRUCTS

On-Line REPORTER III is a high-level language based on the English language and composed of characters, words, and commands. This section describes the basic elements and constructs of the language and the method used to define the language.

ENTERING COMMANDS

Commands are entered from the keyboard of a terminal in a free format. One or more spaces or appropriate punctuation is used to delimit elements of the language. There is a limit of 132 characters per command. Continuation of a command to another line is permitted.

Commands in the On-Line REPORTER III language are composed of On-Line REPORTER III language words, literals, and punctuations.

DEFINITION OF WORDS

A word is a combination of not more than 30 characters which may consist of the alphabetic characters A through Z.

RESERVED WORDS

Reserved words are a subset of English words and abbreviations which are a part of the On-Line REPORTER III language. A list of On-Line REPORTER III reserved words is provided in Appendix D.

OPTIONAL WORDS

Optional words are reserved words included in the language to improve the readability of the command formats. The optional words may be included or omitted by the user. For example, FIRST PAGE is equivalent to FIRST; the inclusion or omission of the word PAGE does not influence the logic of the command.

KEY WORDS

Another type of reserved word is a key word. The category of key words includes the words required to complete the meaning of commands. The category also includes words that have a specific functional meaning. In the command FIRST PAGE, the key word is FIRST.

If a key word is partially underlined, then it may be abbreviated by using the underlined characters. For example, the command FIRST PAGE has only the F underlined, so F is the only character that needs to be entered to perform the function.

LITERALS

A literal represents a data item which has a value identical to the value being described. There are two classes of literals:

1. Numeric literals, or integers.
2. Non-numeric literals, or strings.

INTEGERS

An integer is defined as an element composed of characters chosen from the digits 0 through 9. An integer cannot exceed eight characters. Leading zeroes are ignored.

STRINGS

A string can contain any allowable character with the exception of the quotation mark. The beginning and the end of the string is denoted by a quotation mark, and any character enclosed by the quotation marks is a part of the string. A maximum of 30 characters can be used in a string.

Note that on the B 2000/B 3000/B 4000 Series of Systems only, you must include an @ (at sign) immediately before and after any string with embedded blanks (spaces) under the following two conditions.

1. If you are specifying data items associated with the ACCEPT statement.

2. You enter the string from the ODT (SPO).

For more information, on the ACCEPT statement, see the REPORTER III Report Language User's Guide.

METHOD OF LANGUAGE DEFINITION

The report-language is defined by rules of syntax and semantics. The syntactic rules determine the structure of valid report-language statements. The semantic rules determine which report-language statements have valid meanings and what those meanings are.

SYNTAX DIAGRAMS

The syntactical rules of the On-Line REPORTER III language are described by a syntax diagram constructed of words and arrows. A syntactically correct command is produced by tracing any path along the direction of the arrows. Words and symbols are written as they are encountered along the paths.

Example:

```
 +<- , <-+
 |       |
 --->ROW ---->THE----->BOAT--->GENTLY--->DOWN--> - ------------------>STREAM.
        |      |        |        |         |       |                   |
        |      |        |        |         |       |                   |
        +->YOUR->+      +------>+          |       |----->+            |
                                           |       |      |            |
                                           +->THE--->OLD-+->MILL->+
                                                   |            |
                                                   +----->+
```

2 - 3
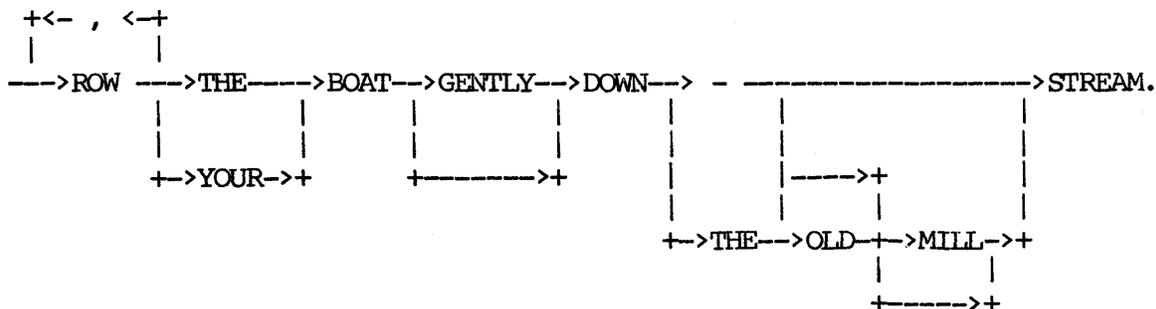
Valid commands from this syntax diagram include:

1. ROW THE BOAT DOWN - STREAM.
2. ROW, ROW, ROW YOUR BOAT GENTLY DOWN THE STREAM.
3. ROW, ROW, ROW, ROW THE BOAT DOWN THE OLD STREAM.
4. ROW YOUR BOAT GENTLY DOWN THE MILL STREAM.
5. ROW THE BOAT DOWN THE OLD MILL STREAM.

The syntactic diagrams occasionally must be continued onto a new line. In this case, the break in the arrows is shown by an on- and off-page connector.

Example:

```
-------->ACROSS--->THE--------------------------------------> (1)


(1) --->WIDE--------------------------------------->MISSOURI.
```
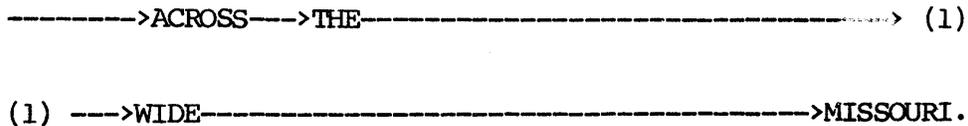
The preceding diagram generates ACROSS THE WIDE MISSOURI.

A bridge over a number indicates that the path may be traced up to the maximum number of times specified by the number under the bridge.

Example:

```
--->ACROSS--->THE------------------------------->MISSOURI.
                   |                    |
                   |<--------- , <---|
                   |                    |
                   |    ____            |
                   |--/ 1 /->BIG--->|
                   |                    |
                   |    ____            |
                   |--/ 1 /->WIDE-->|
                   |                    |
                   |    ____            |
                   +--/ 1 /->MUDDY->+
```
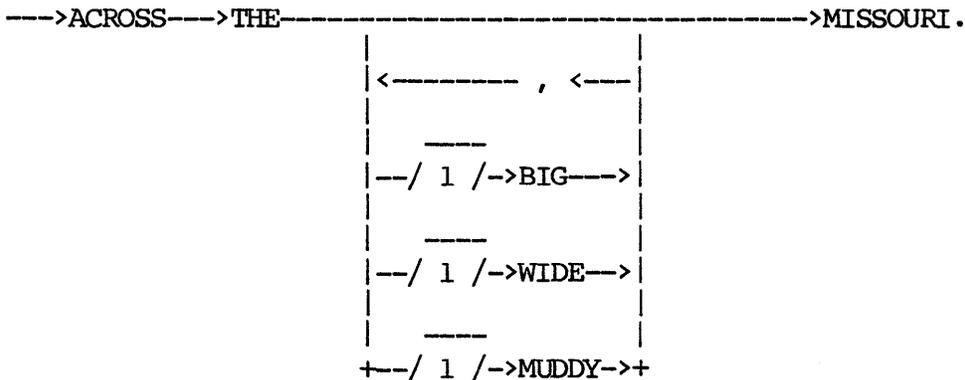
Valid commands include:

1.   ACROSS THE MISSOURI.
2.   ACROSS THE BIG MISSOURI.
3.   ACROSS THE MUDDY, WIDE MISSOURI.
4.   ACROSS THE BIG, WIDE, MUDDY MISSOURI.

A valid production does not include:

1.   ACROSS THE BIG, BIG MISSOURI.
2.   ACROSS THE WIDE, BIG, WIDE MISSOURI.

RESERVED WORDS

Words in uppercase letters are the reserved words in the language and
must be written exactly as shown in the syntax diagrams. Key words are
words required to complete the meaning of statements. Some key words
may be abbreviated by omitting letters from the end of the word. The
minimum required abbreviation is underlined in the syntax diagram. If a
key word must be used in its entirety, then the entire word is
underlined. Optional words having no semantic meaning (noise words) are
included in the language to improve the readability of the command
formats. They are never underlined in the syntax diagrams and, if used,
cannot be abbreviated.

Example:


```
--->REPORT--------------->IS---> <external file name> --->
            |              |
            +-->LISTING->+
```


The reserved words are REPORT, LISTING, and IS. REPORT and IS are the
key words. LISTING is the optional word and must be spelled out if it
is used.

PUNCTUATION

Special characters such as the colon and hyphen must be written as they
appear in the syntax diagrams. Key words, optional words, numeric and
character string constants must be separated from each other by a blank
or a special character. Whenever a blank is used, several blanks may be

given. A blank also may be placed around special characters for readability.

SYNTACTIC VARIABLES

Phrases set off by angle brackets (<>) are syntactic variables which represent information to be supplied by the user. A particular variable may represent a simple language element such as an integer, character, or string; or it may represent a relatively complicated language construct such as an external file name. These variables are defined either by verbal description or by syntax diagrams. In either case, any valid language element or construct derived from the syntactic variable may be inserted into any diagram in place of the variable.

Example:

```
---- -->DOWN---->THE---> <river> --->INTO--->THE---> <ocean>.


    <river>:

------------->MISSISSIPPI------------------------------------->
          |                     |
          |---->COLUMBIA------->|
          |                     |
          +---->HUDSON--------->+


    <ocean>:

------------->ATLANTIC---------------------------------------->
          |                  |
          |---->PACIFIC--->|
          |                  |
          +---->GULF------>+
```
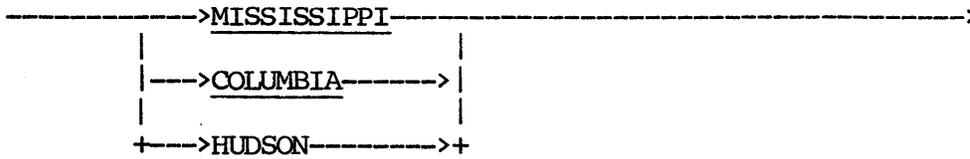
In the first diagram "river" and "ocean" are syntactic variables. Syntactically valid commands include:

1. DOWN THE MISSISSIPPI INTO THE GULF.
2. DOWN THE COLUMBIA INTO THE PACIFIC.
3. DOWN THE HUDSON INTO THE ATLANTIC.

SEMANTIC RULES

Semantic rules are indicated in the syntax diagrams by letters which label the critical paths. The letters reference paragraphs which explain the meaning of corresponding syntax paths and explain additional rules associated with a choice in paths. These rules may make certain syntactically correct commands invalid.

Example:


```
--------->DOWN--->THE-> <river> --->INTO--->THE---> <ocean>.
```


   <river>:

```
         A
------------->MISSISSIPPI------------------------------------->
         |                 |
         | B               |
         |--->COLUMBIA----->|
         |                 |
         | C               |
         +--->HUDSON------->+
```

   <ocean>:

```
         A
------------->ATLANTIC---------------------------------------->
         |               |
         | B             |
         +--->PACIFIC--->+
```
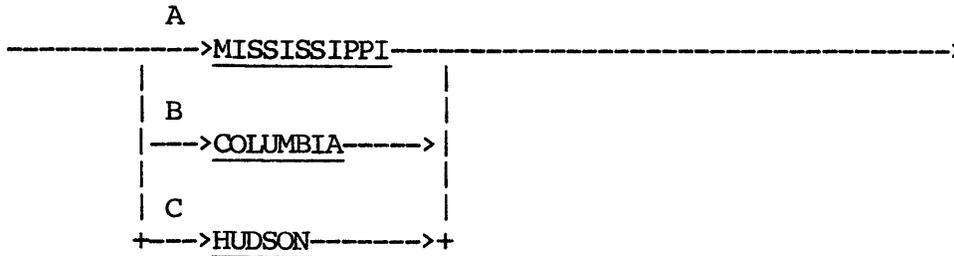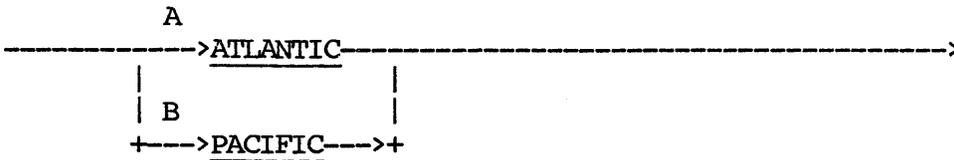

The rules are written to guide the user when choosing the correct paths and supplying the necessary information. By tracing the syntax diagram paths and reading the path prompts, the user composes the On-Line REPORTER III language specifications which describe the particular application.

The semantic rules for "river" would be explained in accompanying paragraphs labeled A, B, and C. The semantic rules for "ocean" would be given in accompanying paragraphs labeled A and B. These paragraphs would explain that the choice of river must match the choice of ocean so that the correct river flows into the correct ocean. Semantically valid commands include:

1. DOWN THE MISSISSIPPI INTO THE ATLANTIC.
2. DOWN THE HUDSON INTO THE ATLANTIC.
3. DOWN THE COLUMBIA INTO THE PACIFIC.

A semantically valid production does not include:

1. DOWN THE MISSISSIPPI INTO THE PACIFIC.
2. DOWN THE COLUMBIA INTO THE ATLANTIC.

SECTION 3

LANGUAGE COMMANDS

This section provides in detail the specifications for all On-Line REPORTER III commands. A syntax diagram is presented for each command followed by the semantics pertaining to the diagram. The examples given are for clarification. Note that external-file-name formats given in the examples may not be valid for B 2000/B 3000/B 4000 Series of Systems. Consult the appendices for information on allowable file-name formats and functional command differences for the particular system in use.

BYE COMMAND

The BYE command informs On-Line REPORTER III to end communications with the user. If the user is not currently running either a generated report program or the REPORTER III System, On-Line REPORTER III sends a final message and goes to end-of-job (EOJ). Otherwise the action taken depends on the particular system in use. This command must be given when the user is finished using On-Line REPORTER III. Consult the appropriate appendix for information on BYE while a RUN is in progress.

The syntax for the BYE command is as follows:

--------->BYE--->

CHANGE COMMAND

The CHANGE command allows the user to rename files while using On-Line REPORTER III. When a program is executed repeatedly, this command can be used to prevent the overwriting of report files with the same name.

The syntax for the CHANGE command is as follows:

```
     A
-------->CHANGE----> <external file name> --->TO---->(1)


(1)----------> <external file name> --->
```

The path of this syntax diagram is explained below:

Path   Explanation

A   The first <external file name> is the old name of the file,
        and the second is the new name.

        Example:

            CHANGE "SALES1" TO "SALES2"

FIRST COMMAND

The FIRST command specifies that the first page of the current report be displayed on the terminal. A GET command must be given sometime prior to using this command to inform On-Line REPORTER III which report is to be accessed.

The syntax for the FIRST command is as follows:

```
        A
--------->FIRST------------------------------------------------->
                 |              |
                 +-->PAGE-->-+
```
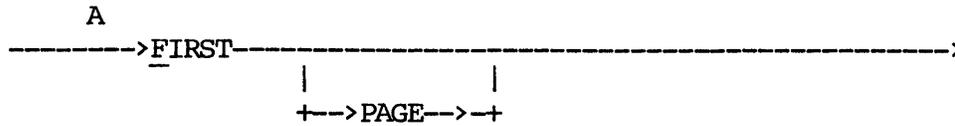
The path of this syntax diagram is explained below:

Path   Explanation

A   This command is used to display the first page of the current
        report.

GET COMMAND

The GET command is used to inform On-Line REPORTER III which report is to be referenced. The GET command must be specified in order to use the following commands: FIRST, LAST, NEXT, PAGE, PREVIOUS, PRINT, SKIP, REMOVE, and VIEW.

If either the page length or width of the report is greater than that of the terminal, a warning message is displayed indicating that condition. If the report was designated to be printed on special forms, a warning message to that effect is also displayed. To change terminal specifications, see TERMINAL COMMAND.

If a password is associated with the vocabulary from which the report was created, then that password is required to access the report.

The syntax for the GET command is as follows:

```
       A
--------->GET----> <external file name> --------------------->
```

The path of this syntax diagram is explained below:

Path   Explanation

A   The <external file name> must be the name of a terminal backup
        file created by REPORTER III or a disk file in the format
        specified in Appendix E. <External file name> becomes the
        current report until another GET command is given.

        Example:

            GET "RL1001"

        The disk file, RL1001, is the next file to be accessed. Any
        report that was previously being referenced is unavailable
        until another GET is done on that file.

LAST COMMAND

The LAST command specifies that the last page of the current report be displayed on the terminal. Sometime prior to using this command a GET command must be given to inform the On-Line REPORTER III System which report is to be accessed. The LAST command displays the summary page of information built at the end of every REPORTER III-generated report.

The syntax for the LAST command is as follows:
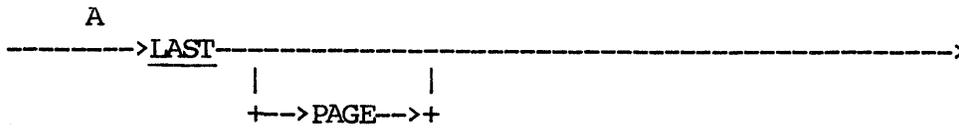
```
        A
-------->LAST--------------------------------------------->
              |                |
              +-->PAGE-->+
```

The path of this syntax diagram is explained below:

Path   Explanation

    A   This path is taken to display the last page of the current
            report.

MESSAGES COMMAND

The MESSAGES command is used to display (on the terminal screen) all of the messages for the current or previous On-Line REPORTER III session. These messages contain information such as beginning-of-job (BOJ), end-of-job (EOJ), and a listing of files created.

The syntax for the MESSAGES command is as follows:

```
              A
------------------------------->MESSAGES----------------------->
            |               |
            | B             |
            +-->RECOVERY--->+
```

The path of this syntax diagram is explained below:

Path   Explanation

A   This path is taken to display the messages for the current
        On-Line REPORTER III session.

B   This path is taken to display the messages from a previous
        session. Note that this path does not exist for B 2000/B
        3000/B 4000 On-Line REPORTER III.

NEXT COMMAND

The NEXT command specifies that the next page of the current report be displayed on the terminal. The NEXT command cannot be used until a specific page is requested for the current report (until a FIRST, LAST, or PAGE command is given). If the current page is the last page in the report and the NEXT command is given, the user is informed that there are no more pages in the report.

The syntax for the NEXT command is as follows:
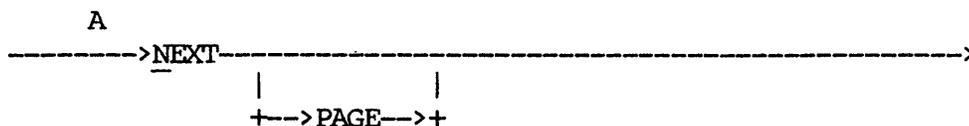
```
        A
--------->NEXT-------------------------------------------->
               |              |
               +-->PAGE-->+
```

The path of this syntax diagram is explained below:

Path   Explanation

A   This path is taken to display the next page of the current
         report.

PAGE COMMAND

The PAGE command specifies that a certain page or range of pages in the current report be displayed on the terminal. Sometime prior to using this command a GET command must be given to inform On-Line REPORTER III which report is to be referenced.

The syntax for the PAGE command is as follows:
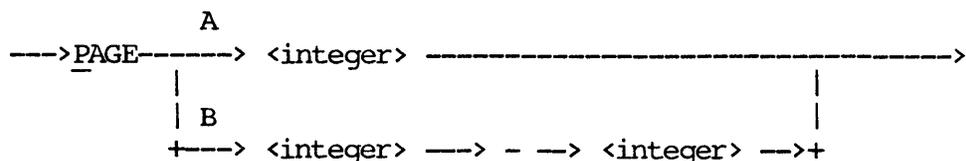

```
              A
--->PAGE------> <integer> -------------------------------->
         |                                      |
         | B                                    |
         +---> <integer> ---> - --> <integer> --->+
```


The paths of this syntax diagram are explained below:

Path   Explanation

A   This path is taken to specify that only one page be displayed
        on the terminal. If the <integer> is larger than the number
        of pages in the report, the user is informed that the
        requested page does not exist.

        Example:

            PAGE 10

        Entering this request on the terminal causes page 10 of the
        current report to be displayed on the user's terminal.

B   This path is taken to specify that a range of pages be readied
        for display on the terminal. The first integer specifies the
        starting page to be displayed, and the second integer
        specifies the last page. The first integer must be equal to
        or less than the second integer. If either integer is larger
        than the number of pages in the report, the user is informed
        that the requested page range does not exist. The starting
        page is displayed. In order to display the next page of the
        report, the user need only transmit a space or blank. This is
        true for both CRT and hard-copy terminals. The user can
        request at any point in the range that the remainder of the
        pages not be displayed. This is done by sending CANCEL
        instead of the blank.

Example:

    PAGE 10-15

This command allows only pages 10 through 15 of the current
report to be displayed on the user's terminal.

PREVIOUS COMMAND

The PREVIOUS command specifies that the previous page of the current report be displayed on the terminal. The PREVIOUS command cannot be used until a specific page is requested for the current report (until a FIRST, LAST, or PAGE command is given). If the current page is the first page in the report, and the PREVIOUS command is given, the user is informed that there is no previous page.

The syntax for the PREVIOUS command is as follows:
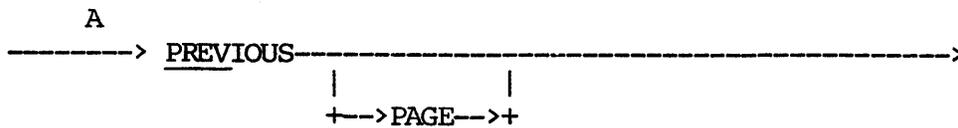
```
        A
--------> PREVIOUS------------------------------------------------>
                      |                  |
                      +-->PAGE-->+
```

The path of this syntax diagram is explained below:

Path   Explanation

A   This path is taken to display the previous page of the current report.

PRINT COMMAND

The PRINT command specifies that the current report or a portion of the current report be printed. Reports can be printed on either a line printer or a remote printer. Sometime prior to using this command, a GET command must be given to inform the On-Line REPORTER III System which report is to be accessed. Whenever a PRINT command is specified, On-Line REPORTER III executes the program OR3PRT to print the requested pages of the current report or TEACH file.

The syntax for the PRINT command is as follows:

```
                   A                   C
---->PRINT----------------------------------------------------------->(1)
                   |       |        |  |
                   |       |->PAGES->-  |  D
                   |                    |---> <integer>---------------->(2)
                   |  B
                   |---><On-Line REPORTER III command>---------------->(3)


(1)------------------------------------------------------------------->
                                          ||                   |
            E                             || G                 |
(2)-------------------------------------->||--->ON <printer name>-|
         |                          |     ||
         | F                        |     ||
         |---> < - >---<integer> --->|     |
                                           |
(3)---------------------------------------|
```

The paths of this syntax diagram are explained below:

Path   Explanation

A   This path is taken to specify printing of the current report
        file on the line printer.

B   This path is taken only when using the TEACH PREFIX command to
        list on the line printer or remote printer a specific On-Line
        REPORTER III command from the TEACH file.

C   This path is taken to specify that the entire current report file be printed on the line printer or on the remote printer.

Example:

     PRINT

This causes the current report to be printed in its entirety.

D   This path is taken to specify that a certain page or range of pages be printed on either the line printer or remote printer (see Paths E and F).

E   This path is taken to specify that a particular page be printed. If the integer specified in Path D is larger than the number of pages in the report, the user is informed that the requested page does not exist.

Example:

     PRINT 10

This command causes page 10 of the current report to be printed on the line printer.

F   This path is taken to specify that a range of pages be printed. The <integer> of path D indicates the starting page, and the <integer> of this path indicates the last page. The starting integer must not be larger than the ending integer. If either integer is greater than the number of pages in the report, the user is informed that the page range does not exist, and no printing is done.

Example:

     PRINT PAGES 10-20

This command causes pages 10 through 20 of the current report to be printed on the line printer.

G   This path is taken to specify that a remote printer be used to print the current report file. The printer name is the name of the remote printer the user supplies in the system literal file (OR3LIT). The remote printing option is available only on the B 1000 and A Series of Systems.

Consult Appendix E for the procedure for changing the literal file and for the format of the modified version.

The remote printer designation can be used with any of the print options described previously.

EXAMPLE:

PRINT PAGES 7-10 ON PRINTERA

This command causes pages 7 through 10 of the current report to be printed on a remote printer.

REMOVE COMMAND

The REMOVE command allows the user to remove the current report file from the disk directory. The only files that may be removed by the user are report files. A report must be current in order to be removed from the directory (a GET command must have been given for that report). If there is no current report, or another user is accessing the report, the command is ignored.

The syntax for the REMOVE command is as follows:

--------->REMOVE--->

Example:

    REMOVE

The current report is removed from the disk directory.

RUN COMMAND

The RUN command specifies that the REPORTER III system is to be run. It
is also used to compile and/or execute a generated report program.

The syntax for the RUN command is as follows:

```
               A
--->RUN------>"RP3REP"--------------------->USING-> <efn> --->(1)
       |
       |       B
       |-->"RP3GEN"---------------->|
       |
       |       C
       |-->"COBOL"   :<efn>------>|
       |
       |       D
       |-->"COBOL74" :<efn>----->|
       |
       |       E
       |-->"COBOL85" :<efn>----->+
       |
       |       F
       |--> <efn> --------------------------------->(2)
       |                                          |
       |       G                                  |
       +--->[ <MCP REPORT PROGRAM ZIP EXECUTION> ]--->+


               H
(1)------------------------------------------------------------->
                                                               |
(2)------------------------------------------------------------>|
      |                                                         |
      |                          +<----------AND<--------+      |
      |                          |                     N |      |
      |   I            J         |   L ----              |      |
      +--->REPORT--------------->TO----/ 1 /--->BACKUP--------->+
          |                      |   |  M                 |  O
          |   K                  |   |                    |
          +--> <efn> ->+         +-/ 1 /--->TERMINAL->+
```

Note that compiler names are restricted to certain systems:

Path	System
C	B 2000/B 3000/B 4000 Systems only.
D	B 1000, and A Series of Systems.
E	A Series of Systems only.

The paths of this syntax diagram are explained below:

Path	Explanation
A	This path is taken to specify that the REPORTER III Language Analysis Program (RP3REP) is to be run. The <external file name> is the name of the report specifications file input from disk. See Appendix A, B, or C for information on creating a specifications file using the text editor on a particular system.

The REPORTER III System runs through specification analysis (RP3REP), program generation (RP3GEN), program compilation (COBOL), and program execution. BOJ and EOJ messages are sent to the terminal for RP3REP, RP3GEN, and the generated COBOL report program. If the REPORTER process-option SUPPRESS statement is included in the specifications to RP3REP, the run process is terminated at the point specified (see the REPORTER III Report Language Operations Guide).

NOTE

Program execution is always suppressed on B 2000/B 3000/ B 4000 Series of Systems.

Example:

RUN "RP3REP" USING "SALESSPEC"

The REPORTER III System is run using the disk file SALESSPEC as specification input to the RP3REP program. The status of the run is displayed on the terminal. When the process terminates without errors, the user is informed of the name of the generated report.

1177151-001

B   This path is taken to specify that the Report Generator program (RP3GEN) is to be run. <External file name> is the name of the parameter file created by RP3REP to be input to RP3GEN.

Example:

    RUN "RP3GEN" USING "PARAMS"

The REPORTER III system is run starting with RP3GEN and using the disk file PARAMS as input.

C   This path is taken to specify that a generated report program is to be compiled with COBOL. The <external file name> immediately after the colon is the name to be given to the compiled report program. If a file by this name already exists on disk, On-Line REPORTER III removes the file before continuing. The second <external file name> is the output file produced by RP3GEN. This COBOL source file is used as input by the COBOL compiler.

Example:

    RUN "COBOL": "INVOIC" USING "RC21"

The source code RC21 is to be compiled with ANSI-74 COBOL, producing the object code INVOIC.

This method is applicable to B 2000/B 3000/B 4000 Series of Systems only.

D   This path is taken to specify that a generated report program be compiled with ANSI-74 COBOL. (Refer to path C for more explanation.)

Example:

    RUN "COBOL74":"INVOIC" USING "RC22"

The source code RC22 is to be compiled with COBOL74, producing the object code INVOIC.

This method is applicable to B 1000 and A Series of Systems only.

E   This path is taken to specify that a generated report program be compiled with ANSI-85 COBOL. (Refer to path C for more explanation.)

Example:

    RUN "COBOL85":"INVEN" USING "RC22"

The source code RC22 is to be compiled with COBOL85, producing the object code INVEN.

This method is applicable to A Series Systems only.

F   This path is taken to specify that a generated report program, indicated by the <external file name>, be executed. If the program exists on disk, it is executed and a report is generated. Care should be taken to ensure that only on-line programs (those with processing mode defaulted or set to on-line) are initiated. See SET PROCESSING MODE statement in the REPORTER III Report Language Operations Guide.

Example:

    RUN "RO42"

G   This path is taken to specify that an on-line program be executed. On-line means the processing mode defaults or is explicitly set in the specifications to on-line so that the program can execute through On-Line REPORTER III. The information between the left and right brackets is passed as is to the MCP. If the first word within the brackets is not _EX_ECUTE, an error occurs, and no action results. The user can file-equate or change any attributes allowed by the system software.

Example:

    RUN [EX RP3JOB FI QEXCEPTIONS NAME
        OR3JOB/EXCPTNS;]

The generated report program RP3JOB is to be executed, and the exceptions report is to be named OR3JOB/EXCPTNS.

H   This path is taken if all reports created by the generated report program are to go to the specified or default medium indicated in the REPORTER III specifications.

Example:

    RUN "SALES"

The generated report program SALES is to be run, and all listings are to be sent to the pre-assigned medium.

I   This path is taken to specify that a report created by executing the generated report program be reassigned or overridden to either the terminal or terminal backup or both.

Only reports initially defaulted or assigned (by the report-option ASSIGN-LISTING statement of REPORTER III) to the terminal or terminal backup can be overridden.

Example:

    RUN "SALES" REPORT TO TERM

The report program SALES is to be run, and the report listing is to be sent immediately back to the terminal. This is usually done for small, one-time reports only.

J   This path is taken to specify that the output medium (terminal or terminal backup) for the first report defined in the report specifications be overridden. If only one report is produced by the generated report program (excluding the exceptions report), this report is sent to the medium requested.

Example:

    RUN "RP3REP" USING "ACCTSSPEC" REPORT TO TERM

The report created by REPORTER III for this run of RP3REP is sent to the terminal even if it was assigned to terminal backup in the report specifications ACCTSSPEC.

K   This path is taken to specify that the output medium for the report named <external file name> be overridden. The report-option SAVE-LISTING statement can be used to assign an external file name to the report. If a report by that name is not defined in the specifications, an error occurs when the report program is executed and the report program is terminated. In this case , the report program object is not removed from the disk directory. The exceptions report cannot be overridden by this command.

Example:

     RUN "SALESREP" REPORT "SALES" TO BACKUP

The report "SALES" produced by running the generated report program SALESREP is to be sent to terminal backup as it is produced even if it was assigned to the terminal in the report specifications.

L   This path is taken to assign the previously specified report to terminal backup. This means that the report program creates the listing as a disk file that subsequently can be paged through. This capability is designed with lengthy reports in mind, since on-line reading of a large report is inefficient.

When accepted data is also included in the report specifications, only one set of accepted data values will be processed for each run of the report program.

Example:

     RUN "RP3REP" USING "EMPSPEC" REPORT TO BACKUP

The REPORTER III System is run starting with RP3REP and continuing with RP3GEN, COBOL compilation, and then report program execution. The report is created as a terminal backup file. |

M   This path is taken to assign the previously specified report output directly to the terminal. The generated report program sends the listing to the terminal as it is being created. This capability is designed with small reports in mind. Lengthy reports are best output on a printer or sent to terminal backup for on-line paging. Only one report may be sent to the terminal for a given run of a generated report program.

Example:

RUN "NEWHIRES" REPORT TO TERM

The report program NEWHIRES is to be run, and the report listing is to be sent directly to the terminal.

The report listing is displayed one page at a time as requested by the user. Page 1 is displayed as soon as it is available. To have subsequent pages of the report shown, the user must transmit a blank (press space bar and transmit key). To request at any time that the report program be discontinued, enter CANCEL. This action causes the report program to go to EOJ, and the building of any terminal backup files is aborted.

N   This path is taken to send the previously specified listing to both the terminal and terminal backup.

Example:

RUN "RO12" REPORT TO BACK AND TERM

The report program RO12 is to be run, and the output listing is to be sent directly to terminal backup and also to the terminal.

O   This path is taken when all listing assignments have been specified.

SKIP COMMAND

The SKIP command specifies that the next displayed page of the current report be a certain number of pages before or after the current page. This command cannot be given until a specific page is requested (i.e., until a FIRST, LAST, or PAGE command is given). If the integer gives a page that does not exist, the user is informed and no action is performed.

The syntax for the SKIP command is as follows:
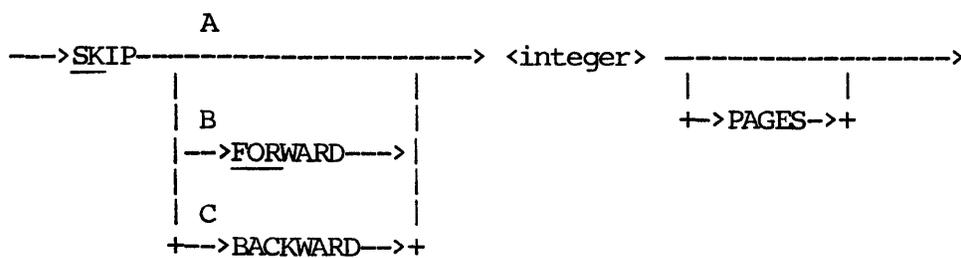
```
           A
--->SKIP------------------------> <integer> ------------------->
         |                    |               |          |
         | B                  |               +->PAGES->+
         |-->FORWARD---->|
         |                    |
         | C                  |
         +-->BACKWARD-->+
```

The paths of this syntax diagram are explained below:

Path   Explanation

A   This path is taken to use the default direction (forward) for
        skipping.

        Example:

            SKIP 10

        If the current page is 10, then 10 pages are skipped and page
        20 is displayed.

B   This path is taken to specify that forward skipping is
        desired. Paths A and B are identical.

        Example:

            SKIP FORWARD 5 PAGES

        If the current page is 10, five pages are skipped and page 15
        is displayed.

C   This path is taken to specify that backward skipping is desired.

Example:

SKIP BACK 5

If the current page is 10, five pages are skipped backward, and page 5 is displayed.

SLEEP COMMAND

The SLEEP command is not available on B 2000/B 3000/B 4000 Series of Systems.

The SLEEP command allows temporary disconnection of the terminal from On-Line REPORTER III. This enables the user to communicate with Command AND Edit (CANDE) to create or edit a specifications file, or free the terminal briefly for other editing while On-Line REPORTER III is still active.

During the period of time when On-Line REPORTER III is temporarily disconnected from the terminal, care should be taken to ensure that the terminal is used only by an MCS. Otherwise, when On-Line REPORTER III resumes communications with the terminal, an abnormal termination may occur. 4000 Series of Systems.

The syntax for the SLEEP command is as follows:


```
                 A
   -->SLEEP---------->  <integer> ------------------------------->
                 |                   |         |      |
                 |                   +->MINUTES->+      |
                 |                                      |
                 |                                      |
                 | B                                    |
                 +-->UNTIL------->  <efn> ------------->+
                                     |         |
                                    +->PRESENT->+
```


NOTE

The <external file name> is abbreviated as <efn>.

The paths of this syntax diagram are explained below:

Path	Explanation
A	This path is taken to designate a time interval during which communications to and from On-Line REPORTER III are temporarily suspended. The user can then commence other activities, such as editing, through CANDE. After <integer> minutes have passed, the user is informed that On-Line

REPORTER III is ready to continue. Two hours (120 minutes) is
the maximum sleep time allowed.

Example:

SLEEP 10 MINUTES

After entering this command, the user has 10 minutes in which
to work without On-Line REPORTER III. If the user is not
finished when On-Line REPORTER III resumes control of the
terminal after the 10 minutes have elapsed, another SLEEP
command may be issued to allow additional time for the user to
finish.

B   This path is taken to suspend On-Line REPORTER III until a
         specified file, <external file name> is created or otherwise
         made available to the disk directory. For instance, with this
         path the SLEEP command can be issued, the CANDE System
         entered, and the original specifications file edited and saved
         under the specified file name.   On-Line REPORTER III then
         automatically resumes control of the terminal and communicates
         with the user.

         Example:

             SLEEP UNTIL "NEWSPEC" PRESENT

         When this command is entered, On-Line REPORTER III is
         suspended until the file NEWSPEC is entered in the disk
         directory.

STATUS COMMAND

The STATUS command is used to obtain information regarding the current status of On-Line REPORTER III. If a RUN command was previously given and the process is still continuing, the user is informed which program is executing. If no RUN command is in progress and no GET command was specified, an appropriate message is returned. If a GET command was given, the following information is displayed about the current report: file name, page length, page width, and number of pages.

The syntax for the STATUS command is as follows:

```
       A
--------->STATUS---------------------------------------------------------->
```

The path of this syntax diagram is explained below:

Path   Explanation

A   If a report is currently being sent to the terminal by a
        report program, and the next page of the report is available
        to the terminal, the following message (which applies only to
        B 1000 Series of Systems) is also displayed:

            "WAITING OK TO CONTINUE."

        The user may then enter a blank or space to view the next page
        of the report or enter CANCEL to terminate the report.

STOP RUN COMMAND

The STOP RUN command allows the user to terminate a run in progress through On-Line REPORTER III. At the time that the STOP RUN command is issued, the portion of the REPORTER III System that is running is terminated, and control remains in the On-Line REPORTER III System. This command is valid only on the A Series of Systems.

The syntax for the STOP RUN command is as follows:


```
     A
--------->STOP---->RUN---------------------------------------->
```


The path of this syntax diagram is explained below:

Path   Explanation

  A   This path is taken to terminate a run in progress.

TEACH COMMAND

The TEACH command provides the user with the capability to request explanations of On-Line REPORTER III commands.

The syntax for the TEACH command is as follows:

```
    A
--->TEACH-------------------------------------------------------->
               |                                          |
               | B                                        |
               +---> <On-Line REPORTER III command> --->+
```

The paths of this syntax diagram are explained below:

Path   Explanation

A   This path is taken to obtain the first page of introduction of
        the TEACH terminal backup file, including a complete list of
        valid commands. The list appears with legal abbreviations and
        has the following format:

        <abbreviation>(<remaining letters>)

        Example:

        TEACH

        The introductory page, including a list of the On-Line
        REPORTER III commands (for example, BYE, CHANGE, VIEW), is
        sent to the terminal.

B   This path is taken to list the syntax diagram and semantics of a particular command.

Example:

    TEACH FIRST

The following is listed on the terminal:

```
FIRST COMMAND.
THE SYNTAX FOR THE FIRST COMMAND IS AS FOLLOWS:

     A
   -->FIRST------------------------------------->
                     |          |
                   +-->PAGE->+


A. The FIRST command specifies that the first
   page of the current report be displayed on
   the terminal.  The GET command must be given
   prior to this command to inform On-Line
   REPORTER III which report is to be accessed.
```
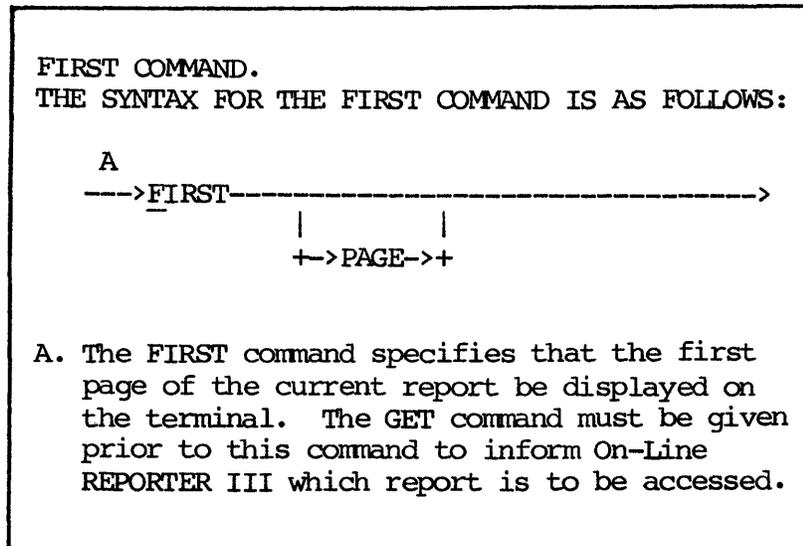
If the entire text of the syntax and semantics for the command requires more space than the terminal can display, the beginning portion of the text is sent directly to the terminal. The user can then use the TEACH PREFIX command to reference the remaining portions. (See the TEACH PREFIX command which follows.)

TEACH PREFIX COMMAND

The TEACH PREFIX command allows the user to access the TEACH file on terminal backup with any of the paging-related On-Line REPORTER III commands.

The TEACH PREFIX character is defined as follows: "*" on B 1000 and A Series of Systems, "@" on B 2000/B 3000/B 4000 Series of Systems. Further illustrations in this section use "*" rather than TEACH PREFIX for brevity. On-Line REPORTER III always has access to the TEACH file; a GET command is not needed.   However, a current page number must be established by one of the following commands: *FIRST, *LAST, *PAGE, or TEACH.
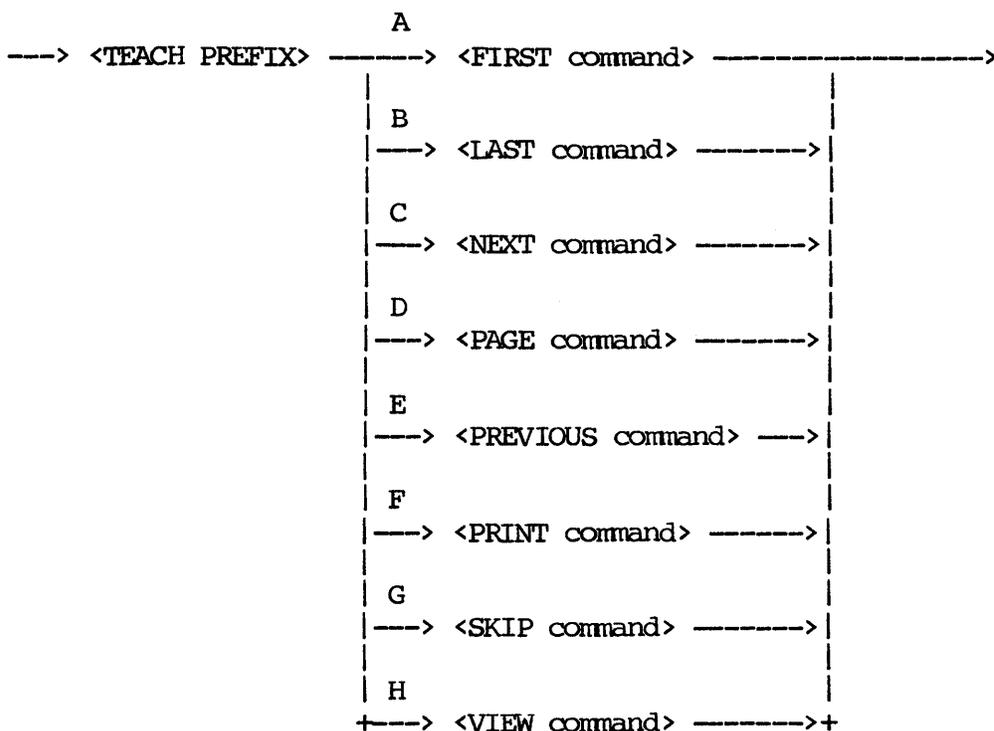
```
                              A
---> <TEACH PREFIX> -------> <FIRST command> ------------------->
                     |                             |
                     | B                           |
                     |---> <LAST command> ------->|
                     |                             |
                     | C                           |
                     |---> <NEXT command> ------->|
                     |                             |
                     | D                           |
                     |---> <PAGE command> ------->|
                     |                             |
                     | E                           |
                     |---> <PREVIOUS command> --->|
                     |                             |
                     | F                           |
                     |---> <PRINT command> ------>|
                     |                             |
                     | G                           |
                     |---> <SKIP command> ------->|
                     |                             |
                     | H                           |
                     +---> <VIEW command> ------->+
```

The paths of this syntax diagram are explained below:

Path   Explanation

   A   This path is taken to display the first page of the TEACH file
           on the terminal.

Example:

    *FIRST

This is equivalent to giving the TEACH command, and displays
the introduction containing a list of all valid On-Line
REPORTER III commands from page 1 of the TEACH file.

B   This path is taken to display the last page of the TEACH file
on the terminal.

Example:

    *LAST PAGE

C   This path is taken to specify that the next consecutive page
of the TEACH file be displayed on the terminal. The *NEXT
command cannot be used until a specific page is requested for
the TEACH file (until a *FIRST, *PAGE, or TEACH command is
given).

Example:

    *NEXT

If the user gave the TEACH RUN command, the first page of the
RUN command would be displayed on the terminal. The *NEXT
command would then display the next page of the RUN command on
the terminal.

D   This path is taken to specify that a certain page or range of
pages of the TEACH file be displayed on the terminal.

E   This path is taken to specify that the previous page of the
TEACH file be displayed on the terminal. The *PREVIOUS
command cannot be given until a specific page is requested
(until a TEACH, *LAST, or *PAGE command is given).

Example:

    *PREV

F   This path is taken to cause a portion of the TEACH file to be
printed on either the line printer or on the remote printer.
Although the PRINT command allows explicit statement of a
range of pages to be printed (see path F of the PRINT
command), it also allows printing pages of the TEACH file

according to the contents rather than the page numbers (see path B of the PRINT command).

Example:

   *PRINT RUN

This causes all pages of the TEACH file containing the syntax and semantics of the RUN command to be printed on either the line printer or the remote printer.

G   This path is taken to specify that the next page of the TEACH file to be displayed be a certain number of pages before or after the current page. The *SKIP command cannot be used until a specific page is requested for the TEACH file (until a *FIRST, *LAST, *PAGE, or TEACH command is given).

Example:

   *SKIP BACK 2

A user who desires to see the RUN command's syntax and semantics would give the TEACH RUN command to see the syntax. Then the *NEXT command, given twice, would display the first two pages of semantics. To see the syntax again, the *SKIP BACK 2 command would return to the syntax page from the semantics pages.

H   This path is taken to specify that a certain portion of the current page of the TEACH file be displayed on the terminal. It gives the user, whose terminal dimensions are smaller than the dimensions of the TEACH file pages (60 lines by 72 characters), the ability to view the entire TEACH page, a portion at a time. The *VIEW command cannot be used until a specific page is requested for the TEACH file (until a *FIRST, *LAST, *PAGE, or TEACH command is given).
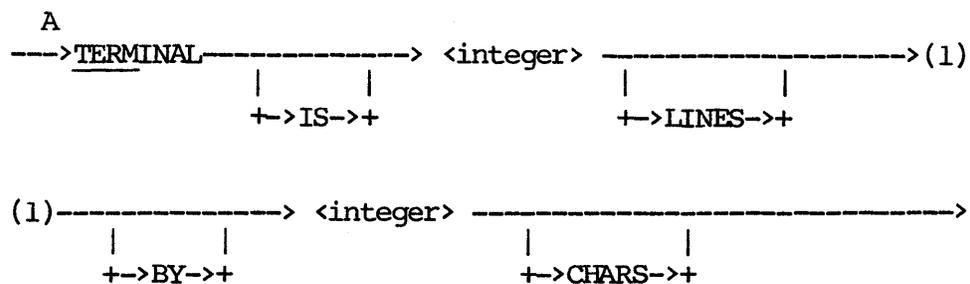
TERMINAL COMMAND

The TERMINAL command is used to specify the dimensions of the user's terminal for display purposes. This command should be given only once, at the beginning of the user's session, if the attributes (length and width) of the terminal are not the default values.

The syntax for the TERMINAL command is as follows:

```
   A
---->TERMINAL--------------->  <integer> ------------------->(1)
             |       |                    |            |
             +-->IS->+                    +-->LINES->+


(1)---------------->  <integer> --------------------------------->
      |       |                   |          |
      +-->BY->+                   +-->CHARS->+
```

The path of this syntax diagram is explained below:

Path   Explanation

   A   The first integer sets the number of lines that fits on the
          terminal. The second integer sets the number of characters
          that fits on a line. If the second integer is greater than
          80, a hard-copy device is assumed. If the TERMINAL command is
          not given, the default values are 24 lines and 80 characters.

          Example:

              TERM IS 12 LINES BY 40 CHARS

          The user of a TD 730 terminal would use this command to define
          the terminal dimensions for On-Line REPORTER III.

                              NOTE

              A TELETYPE is treated as a special case of a
              hard-copy terminal. Zero lines must be specified as
              the terminal length and 72 characters as the width.

VIEW COMMAND

The VIEW command specifies that a certain portion of the report be displayed on the terminal. It gives the user, whose terminal dimensions are smaller than the dimensions of the report page, the capability to view the entire report page, a portion at a time.

The VIEW command cannot be used until a specific page is requested for the current report (until a FIRST, LAST, or PAGE command is given).

Note that in the following diagram, the <integer> is abbreviated as <i>. The syntax for the VIEW command is as follows:

```
                 A
---->VIEW----------------------------------------------------------------->
         |                                                    |      |
         | B                                                  |      |
         |-->FROM--------------->  <i>  --------------->  <i> ->+     |
         |        |        |               |         |              |
         |        +->LINE->+               +->POSITION->+           |
         |                                                          |
         |                        ----            L                 |
         |      +<----------------/ 1 /<-----------------+          |
         |      |        |        |                      |    |     |
         |      |        +<--AND<--+                      |    |     |
         |      |        |                                |    |     |
         | C    |     ----    D              H            |    |     |
         +------>/ 1 /------>UP--------------------------------+-->+
                 |      |               |   |                  |  |
                 |      | E             |   |I                 |  |
                 |      +---->DOWN--->+  +--> <i> ------------->+  |
                 |                                |          |     |
                 |                                +->LINES->+      |
                 |                                                 |
                 |     ---- F              J                       |
                 +->/ 1 /--->RIGHT----------------------------->+  |
                        |        |   |                         |  |
                        |G       |   | K                       |  |
                        +->LEFT--->+  +--> <i>  --------------->|  |
                                         |            |           |
                                         +->POSITIONS->+
```

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The paths of this syntax diagram are explained below:

Path   Explanation

A   This path is taken to specify that the default view of the
         report page be displayed.

         Example:

             VIEW

         This command causes a segment of the current report page, with
         line 1, character position 1 as the upper left-hand corner of
         the view, to be displayed on the terminal.

B   This path is taken to override the default values and specify
         the   upper left-hand corner, which determines   the view
         displayed on the terminal. The first integer is the starting
         line number.   The second integer is the starting character
         position.

         Example:

             VIEW FROM LINE 10 POSITION 19

         This option allows the user to view that portion of the report
         that starts on line 10, character position 19. This position
         defines the upper left-hand corner of the terminal.

C   This path is taken to specify a new view of the current report
         page relative to the current view.

D   This path is taken to specify movement of the view boundary in
         an upward direction on the current report page.   If the
         current view starts with line 25 and the user wants to see
         lines 24, 23, 22, etc., this path of the VIEW command is used.

         Example:

             VIEW UP

This causes the view to move up from the current line position by the number of lines the terminal holds. That is, if the terminal has a capacity of 24 lines, and the current view is of lines 25-48, this command moves the view to lines 1-24.

E   This path is taken to specify movement of the view boundary in a downward direction on the current report page. If the current view ends with line 24, and the user wants to see lines 25, 26, 27, etc., this path of the VIEW command is used.

Example:

    VIEW DOWN

This causes the view to move down from the current line positions by the number of lines that the terminal holds. That is, if the terminal has a capacity of 24 lines, and the current view is of lines 1-24, this command moves the view to lines 25-48.

F   This path is taken to specify movement of the view boundary in the right direction on the report page. If the current view has a right boundary at character position 40 and the user wants to see positions to the right, (41, 42, 43, etc.), this path of the VIEW command is used.

Example:

    VIEW RIGHT

This causes the view to move right from the current character position by the number of positions that the terminal holds. That is, if the terminal has a capacity of 40 characters per line, and the current view is of positions 1-40, this command moves the view to positions 41-80.

G   This path is taken to specify movement of the view boundary in the left direction on the report page. If the current view has a left boundary of character position 41, and the user wants to see positions to the left, (40, 39, 38, etc.), this path of the VIEW command is used.

Example:

    VIEW LEFT

This causes the view to move left from the current character
position by the number of positions that the terminal holds.
That is, if the terminal has a capacity of 40 characters per
line, and the current view is of positions 41-80, this command
moves the view to positions 1-40.

H   This path is taken to specify that the view be moved
       vertically to the default number of lines (the terminal
       length). See examples of VIEW UP and VIEW DOWN described in
       preceding paragraphs.

I   This path is taken to specify that the view be moved
       vertically a certain number of lines.

       Example:

           VIEW UP 3 LINES

       This moves the current view up to include the 3 lines of the
       current report page that immediately precede the current first
       line of view. If line 12 were the first line of the current
       view, line 9 would be the first line of the new view.

J   This path is taken to specify that the view be moved
       horizontally the default number of character positions (the
       terminal width). See examples under paragraphs F and G.

K   This path is taken to specify that the view be moved
       horizontally a certain number of character positions.

       Example:

           VIEW LEFT 10 POSITIONS

       This moves the current view to the left to include 10
       character positions of the report page that fall to the left
       of the current first character position being displayed. If
       character position 50 were the first position of the current
       view, position 40 would be the first position of the new view.

L   This path is taken to specify movement of the current view in
     two directions at once: up (or down) and right (or left).

     Example:

          VIEW UP AND RIGHT

     The combined results of the vertical and horizontal directions
     is a diagonal movement of the view.

     Examples:

          VIEW DOWN 5 LINES AND LEFT 3 POSITIONS
          VIEW RIGHT AND UP 11 LINES
          VIEW LEFT 6 DOWN
          VIEW UP 2 RIGHT 9
          V DOWN 10 AND RIGHT 1

SECTION 4

SYSTEM EXAMPLES

This section presents examples to help familiarize the user with the On-Line REPORTER III System. Most commands are demonstrated and different features are highlighted. The On-Line REPORTER III commands are explained in detail in Section 3.

This section presents four examples of sample sessions: one example for each type of system and one example covering paging commands. Specifically, Example 1 covers the B 1000 Series of Systems, Example 2 covers the B 2000/B 3000/B 4000 Series of Systems, and Example 3 covers the A Series of Systems. Example 4 covers the paging commands for all systems. The user is encouraged to process these examples at a terminal.

The vocabulary and data files used are included on the release tape and are called OR3VSP and OR3EMP respectively. Before these files can be used, a report specifications file must be created through CANDE and saved on disk as OR3SPC exactly as follows:

```
000100 VOCAB IS "OR3VS1".
000200 SUPPRESS COBOL.
000300 SAVE OBJECT AS "EMPLOY".
000400 ASSIGN ACCEPTED-DATA TO TERM.
000500 ASSIGN REPORT LISTING TO TERM.
000600 ACCEPT START-DATE NUMERIC(4).
000700 SET PAGE-WIDTH TO 80, PAGE-LENGTH TO 24.
000800 INPUT PERSONNEL.
000900 SELECT YEAR-EMPLOYED > START-DATE.
001000 TITLE "EMPLOYEE REPORT: HIRE DATE > " START-DATE.
001100 REPORT DEPT, NAME, YEAR-EMPLOYED.
```

Notice that the COBOL listing is suppressed and the generated report program object code is saved as "EMPLOY" so that it can be executed later.

A listing of OR3VSP is presented in the following example.

Example:

```
000100 VOCABULARY FILES ARE "OR3VS1" AND "OR3VS2".
000200 LIST LIBRARY VOCAB.
000300 SOURCE FILE FOLLOWS.
000400 FILE-CONTROL.
000500     SELECT PERSONNEL ASSIGN TO DISK.
000600 DATA DIVISION.
000700 FD PERSONNEL
000800     VALUE OF FILENAME IS "OR3EMP".
000900 01   PERSONNEL-RECORD.
001000     03  SOC-SEC-NO            PICTURE 9(9).
001100     03  SOC-SEC-DF  REDEFINES SOC-SEC-NO.
001200         05 SOC-SEC-DG         PIC 9 OCCURS 9 TIMES.
001300     03  DEPARTMENT           PICTURE 9.
001400         88   EDP             VALUE 1.
001500         88   ENGINEERING     VALUE 2.
001600         88   EXECUTIVE-STAFF VALUE 3.
001700         88   SALES           VALUE 4.
001800         88   SUPPORT         VALUE 5.
001900     03  NAME                 PICTURE X(25).
002000     03  YEAR-EMPLOYED        PICTURE 9999.
002100     03  JOB-LEVEL            PICTURE 99.
002200     03  M-SALARY             PICTURE 9(4)V99.
002300     03  TITLE                PICTURE X(20).
002400     03  SEX                  PICTURE 9.
002500     03  MARITAL-STATUS       PICTURE 9.
002600         88   UNMARRIED       VALUE 1.
002700         88   MARRIED         VALUE 2.
002800     03  SKILL-CODE.
002900         05   SKILL-CATEGORY  PICTURE 99.
003000             88   UNSKILLED   VALUE 1.
003100             88   SEMI-SKILLED VALUE 2.
003200             88   CLERICAL    VALUE 3 THRU 5.
003300             88   SUPERVISORY VALUE 6 THRU 10.
003400             88   PROFESSIONAL VALUE 11, 12.
003500             88   ADMINISTRATIVE VALUE 15, 16.
003600         05   SKILL-LEVEL     PICTURE  99.
003700             88   TRAINEE     VALUE 1.
003800             88   ASSOCIATE   VALUE 2.
003900             88   JOURNEYMAN  VALUE 3.
004000             88   SENIOR      VALUE 4.
004100     03  SEQ-NO               PIC 9(6).
004200     03  FILLER               PIC X(9).
004300 END-OF-JOB.
004400 FILE PERSONNEL.
004500     M-SALARY WITH PICTURE "$Z(3)9.99".
004600     MALE REFERS TO SEX WITH VALUE 1.
004700     FEMALE REFERS TO SEX WITH VALUE 2.
004800 END FILE.
```

The file presented above should be run using RP3VOC before continuing.

COMMANDS USED IN EXAMPLES

The user is encouraged to try different commands and variations of the
examples indicated below for familiarization with On-Line REPORTER III
and its recovery capabilities. Use of a CRT terminal is assumed unless
otherwise noted.

1.   Example 1: (B 1000 Systems)
     RUN, GET, FIRST, VIEW, REMOVE, SLEEP, STATUS, BYE

2.   Example 2: (B 2000/B 3000/B 4000 Systems)
     RUN, STATUS, GET, FIRST, VIEW, REMOVE, BYE

3.   Example 3: (A Series of Systems)
     RUN, GET, FIRST, VIEW, REMOVE, SLEEP, STATUS, BYE

4.   Example 4: (All systems)
     RUN, GET, FIRST, NEXT, PAGE, LAST, SKIP, TEACH, *VIEW, *NEXT,
     PRINT

NOTE

Some blank lines and columns are deleted in the
example report listings to compact the size of the
manual. Report names vary for each On-Line REPORTER
III session.

The following On-Line REPORTER III session (Examples 1 through 3) is
held on a CRT screen to debug the specifications file and run REPORTER
III from the terminal.

In the following examples, one or more X's indicates the presence of
variable information.

EXAMPLE 1: B 1000 SERIES OF SYSTEMS

Step 1:   On-Line   REPORTER III can be initiated in one of the following
          ways.

If running only through SMCS:

User enters: ?EX OR3REP FILE OR3REM NAME LSNXXX

          Where XXX in LSNXXX stands for the station   number where
          you are working.

If running under CANDE through SMCS:

User enters: EX $OR3REP

System response: Refer to Figure 4-1.

```
          ***    B   1000    ****

     *** ON-LINE REPORTER III ***



     START TIME:   HH:MM:SS

        JOB #:   XXXX

      TERMINAL: 24 BY 80

  PLEASE ENTER YOUR NAME

  ---------------------------------------------------------------

  THANK YOU FOR NAME -- PLEASE CONTINUE
```

Figure 4-1.   Initiate On-Line REPORTER III
              Display Screen
              (B 1000 Systems)

After the first part of the display screen shown in Figure 4-1 appears,
the user should enter a unique name with which On-Line REPORTER III can
associate the messages for this session.   These messages may be
retrieved at any time by use of the MESSAGES command. The second part

of the display screen is the system's response to the user after the unique name is transmitted.

Refer to Appendix A for more information on B 1000 operation.

Step 2:   Run REPORTER III using the specifications file previously saved on disk.

User enters: RUN "RP3REP" USING "OR3SPC"

System response: Refer to Figure 4-2.

```
BEGIN ANALYSIS OF "OR3SPC"
---------------------------------------------------------------

END ANALYSIS OF "OR3SPC" -- 001 ERROR(S)
DIAGNOSTIC REPORT "RDXX" AVAILABLE FOR PAGING
RUN FINISHED
```

Figure 4-2.   RUN REPORTER III
              Display Screen
              (B 1000 Systems)

Step 3: Obtain the diagnostic report file to determine which errors are in the specifications file.

User enters: GET "RDXX"

System response: Refer to Figure 4-3.

```
REPORT FILE NAME IS:
"RDXX"
PAGE LENGTH:       60 WARNING:  PAGE LENGTH EXCEEDS TERM LENGTH
PAGE WIDTH:        132 WARNING:  PAGE WIDTH EXCEEDS TERM WIDTH
NUMBER OF PAGES:   1
DATE CREATED:      MM/DD/YY
```

Figure 4-3.   GET Command
Display Screen
(B 1000 Systems)

The diagnostic report file for On-Line REPORTER III is always a terminal backup file with unmodifiable dimensions. However, it can be completely examined using the On-Line REPORTER III paging commands and VIEW command.

Step 4: Examine the diagnostic report to determine the errors.

User enters: FIRST

System response: Refer to Figure 4-4.

```
* * * * * *   B U R R O U G H S     B 1 0 0 0      R E P O R T E R

                                          * * * R P 3 R E P * * *


              DATE OF RUN:    MM/DD/YY
              TIME OF RUN:    HH:MM:SS
              RP3REP ID #:    XX


     000100     VOCAB IS "OR3VS1".

     000200     SUPPRESS COBOL.

     000300     SAVE OBJECT AS "EMPLOY".

     000400     ASSIGN ACCEPTED-DATA TO TERM.

     000500     ASSIGN REPORT LISTING TO TERM.

     000600     ACCEPT START-DATE NUMERIC(4).
```

Figure 4-4. FIRST Command
             Display Screen
             (B 1000 Systems)

Step 5: View the rest of the page.

User enters: VIEW DOWN 20

System response: Refer to Figure 4-5.

```
      000500      ASSIGN REPORT LISTING TO TERM.

      000600      ACCEPT START-DATE NUMERIC(4).

      000700      SET PAGE-WIDTH TO 80, PAGE-LENGTH TO 24.

      000800      INPUT PERSONNEL.

      000900      SELECT YEAR-EMPLOYED > START-DATE.

      001000      TITLE "EMPLOYEE REPORT: HIRE DATE > " START-DATE.

      001100      REPORT DEPT, NAME, YEAR-EMPLOYED.
                          *

  *ERROR* 10 PREVIOUS <NAME> UNIDENTIFIED, 'IS' REQUIRED FOR
          DEFINITION

  TOTAL NUMBER OF ERRORS    IS 001

  TOTAL NUMBER OF WARNINGS IS 000
```

Figure 4-5. VIEW Command
             Display Screen
             (B 1000 Systems)

A check of the report specifications against the vocabulary
specifications reveals that the data item DEPARTMENT should be spelled
out rather than abbreviated as DEPT.

Step 6:   Now that the error is identified,   the diagnostic   report is no
          longer needed.   Remove it from the disk directory.

User enters: REMOVE

System response: Refer to Figure 4-6.

```
"RDXX"  REMOVED




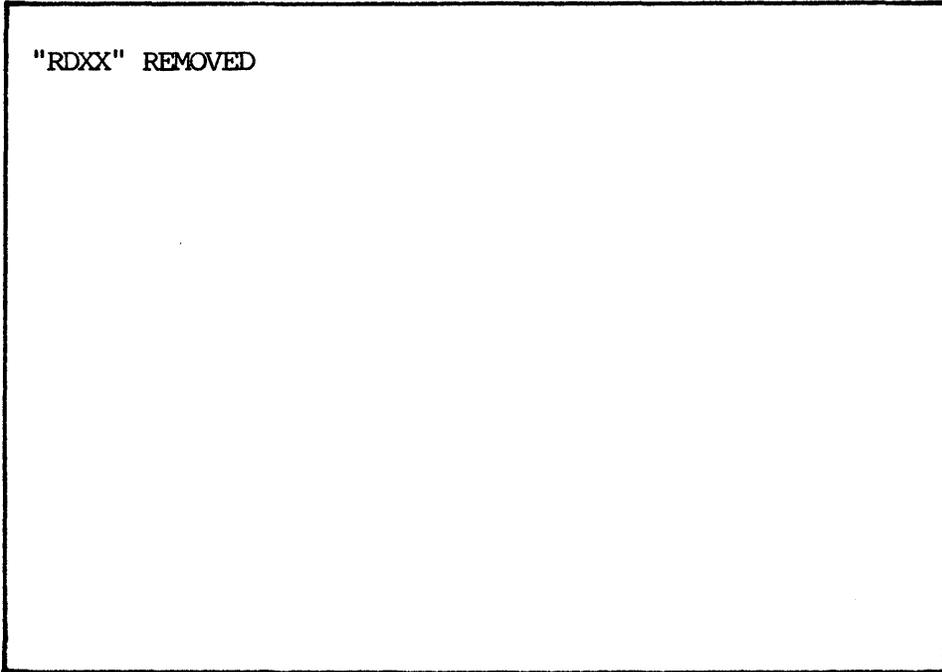```

Figure 4-6.   REMOVE Command
              Display Screen
              (B 1000 Systems)

Step 7: Suspend On-Line REPORTER III until the specifications file is edited and saved as NEWSPECS.

User enters: SLEEP UNTIL "NEWSPECS" PRESENT

System response: Refer to Figure 4-7 (page 1 of 2).

```
SLEEP UNTIL "NEWSPECS" PRESENT INITIATED AT: HH:MM:SS


```
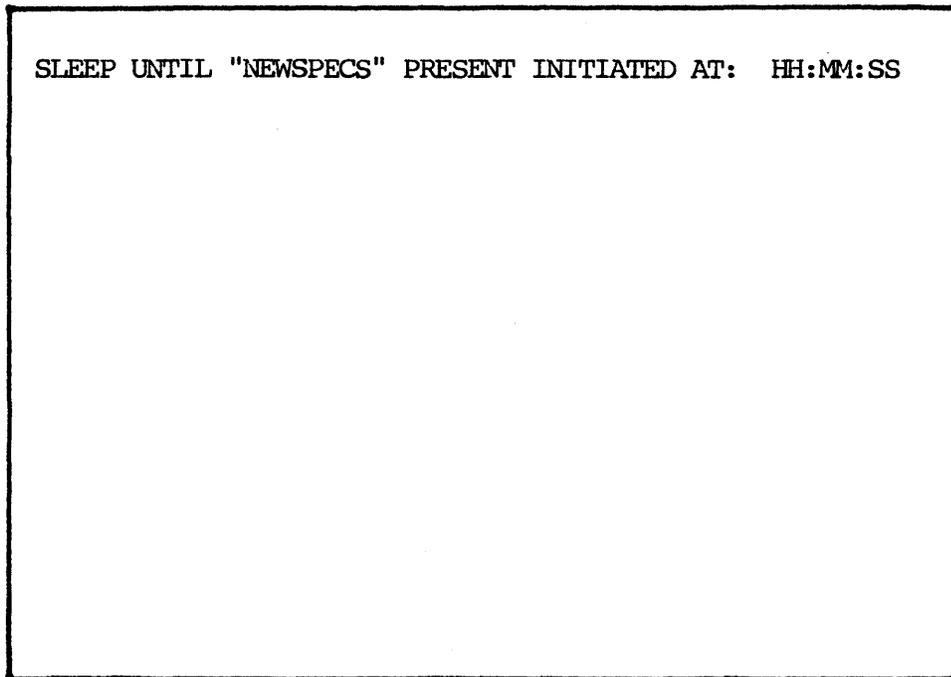
Figure 4-7.  SLEEP Command
            Display Screen
            (B 1000 Systems)
            (page 1 of 2)

CANDE again has control of the terminal.  Use CANDE commands to obtain the specifications file.  Save the new specifications file as NEWSPECS, and remove the old specifications file to avoid cluttering the disk. On-Line REPORTER III then automatically awak....

NOTE

The correction to be made is: change DEPT to
DEPARTMENT in OR3SPC (REPORTER III report
specification file).


System response:   Refer to Figure 4-7 (page 2 of 2).

```
SLEEP TERMINATED AT: HH:MM:SS


```
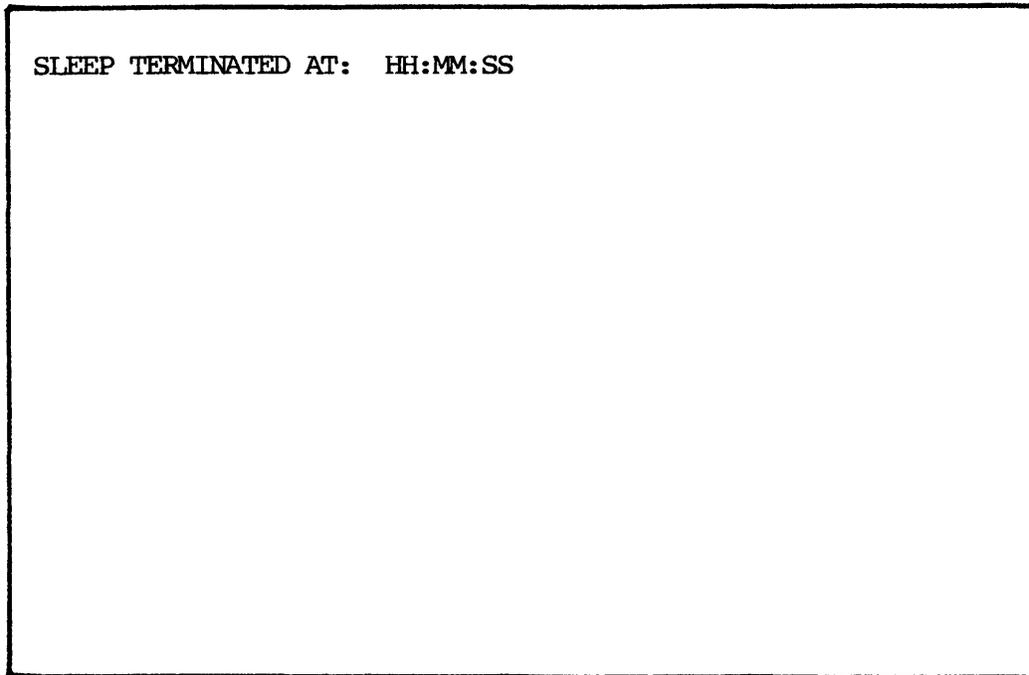
Figure 4-7.   SLEEP Command
             Display Screen
             (B 1000 Systems)
             (page 2 of 2)

Step 8:  Rerun REPORTER III with the new specifications.

User enters:  RUN "RP3REP" USING "NEWSPECS"

System response:  Refer to Figure 4-8.

```
BEGIN ANALYSIS OF "NEWSPECS"
-------------------------------------------------------------------

END ANALYSIS OF "NEWSPECS" -- NO ERRORS
DIAGNOSTIC REPORT "RDXX" AVAILABLE FOR PAGING
-------------------------------------------------------------------

BEGIN GENERATION OF "EMPLOY"
```

Figure 4-8.   RUN REPORTER III
              Display Screen
              (B 1000 Systems)

Step 9:   Since there are no errors in the specifications, the diagnostic
report can be ignored, but removing it frees disk space.

User enters: GET "RDXX"

System response: Refer to Figure 4-9 (page 1 of 2).

```
REPORT FILE NAME IS:
"RDXX"
PAGE LENGTH:        60 WARNING:  PAGE LENGTH EXCEEDS TERM LENGTH
PAGE WIDTH:         132 WARNING: PAGE WIDTH EXCEEDS TERM WIDTH
NUMBER OF PAGES:    1
DATE CREATED:       MM/DD/YY
```

Figure 4-9.   GET/REMOVE Command
Display Screen
(B 1000 Systems)
(page 1 of 2)

Step 10: Remove the diagnostic report.

User enters: REM

System response: Refer to Figure 4-9 (page 2 of 2).

```
"RDXX" REMOVED
----------------------------------------------------------------
END GENERATION OF "EMPLOY"
----------------------------------------------------------------
COMPILATION OF "EMPLOY" INITIATED




```

Figure 4-9.   GET/REMOVE Command
             Display Screen
             (B 1000 Systems)
             (page 2 of 2)

Step 11: Inquire about the status of the system.

User enters: STATUS

System response: Refer to Figure 4-10 (page 1 of 2).

```
STATUS:
NO CURRENT REPORT FILE


CURRENTLY COMPILING
"EMPLOY"
```

Figure 4-10. STATUS Command
             Display Screen
             (B 1000 Systems)
             (page 1 of 2)

System response: Refer to Figure 4-10 (page 2 of 2).

```
 _____
|                                                              |
|                                                              |
|   END COMPILATION OF "EMPLOY"                                 |
|   _____   |
|                                                              |
|                                                              |
|   BEGIN EXECUTION OF "EMPLOY"                                 |
|   _____   |
|                                                              |
|                                                              |
|   ENTER THE FOLLOWING ACCEPTED DATA                          |
|   NAME:                          TYPE:                        |
|                                                              |
|   Q-START-DATE                   NUMBER                       |
|                                                              |
|   PLEASE ENTER ACCEPTED DATA NOW                              |
|                                                              |
|                                                              |
|                                                              |
|_____|
```

Figure 4-10.   STATUS Command
                Display Screen
                (B 1000 Systems)
                (page 2 of 2)

Step 12: Enter the requested data item.

User enters: 1969

System response: Refer to Figure 4-11.

```
ACCEPTED DATA SENT TO "EMPLOY"

-----------------------------------------------------------------------

                                                           PAGE 1
                  EMPLOYEE REPORT: HIRE DATE >   1969


DEPARTMENT              NAME                                YEAR
                                                           EMPLOYED


EDP                     BOWERS, FRED H                      1970
SALES                   DEVLIN, ROBERT L                    1972
SUPPORT                 DREW, CHESTER L JR                  1971
ENGINEERING             FENTON, PAUL F                      1971
ENGINEERING             FORBES, CAROL A                     1970
SUPPORT                 FROST, RICHARD M                    1971
SUPPORT                 HALEY, HENRY F                      1970
ENGINEERING             HAWLEY, EDWARD W                    1971
EDP                     KAUFMAN, MAURICE M                  1972
EDP                     LENOX, ANNE S                       1971
SUPPORT                 LIBBY, CHERYL J                     1970
SALES                   MARLOW, BARBARA E                   1970
SUPPORT                 MC COURT, BERNARD E JR              1970
ENGINEERING             MC COY, MEREDITH                    1972
SUPPORT                 MC CRAY, WILLIE P                   1971
SUPPORT                 MC DOUGALL, JAMES F                 1971
SUPPORT                 MAC INTOSH, MARGARET A              1971
ENGINEERING             MAC KAY, DUNCAN R                   1972
```

Figure 4-11. Requested Data Item
              Display Screen
              (B 1000 Systems)

Step 13: After reading page 1, request the next page.

User enters: A blank response.

System response: Refer to Figure 4-12 (page 1 of 4).

```
                                                    PAGE 2
                     EMPLOYEE REPORT:   HIRE DATE >   1969

                                                    YEAR
     DEPARTMENT                 NAME                 EMPLOYED

     ENGINEERING               MAC NEIL, AUDREY          1972
     ENGINEERING               MAC QUEEN, DAVID B        1971
     SUPPORT                   MOORE, MARK G             1972
     EDP                       PATTERSON, WILLIAM O      1971
     EDP                       REEVES, PAULINE           1970
     EDP                       SANDERS, ANN              1971
     ENGINEERING               TAYLOR, SHARON F          1970
     SUPPORT                   VAN WERT, HELEN R         1970
     ENGINEERING               WEAVER, JANET             1970
     ENGINEERING               WILSON, HAROLD G          1970
     ENGINEERING               WYMAN, EDWIN T JR         1971
     SUPPORT                   WYMAN, ELIZABETH C        1972
```

Figure 4-12.   Next Pages
               Display Screen
               (B 1000 Systems)
               (page 1 of 4)

Step 14:   Request the next page.

User enters: A blank response.

System response: Refer to Figure 4-12 (page 2 of 4).

```
                                                        PAGE 3
                EMPLOYEE REPORT:   HIRE DATE > 1969

SUMMARY OF RECORDS INPUT
     AND SELECTED FROM INPUT


INPUT SECTION

PERSONNEL

RECORDS ACCESSED:          64
NULL RECORDS ADDED:         0
TOTAL RECORDS INPUT:       64
RECORDS SELECTED:          64




REPORT SECTION 1

LOGICAL RECORDS

INPUT:                     64
```

Figure 4-12.   Next Pages
               Display Screen
               (B 1000 Systems)
               (page 2 of 4)

Step 15: Request the next page.

User enters: A blank response.

System response: Refer to Figure 4-12 (page 3 of 4).

```
                                                    PAGE 4
              EMPLOYEE REPORT:  HIRE DATE > 1969

  SUMMARY OF RECORDS INPUT
       AND SELECTED FROM INPUT


  SELECTED:                30



  **NUMBER OF EXCEPTIONS:    0
```

Figure 4-12. Next Pages
              Display Screen
              (B1000 System)
              (page 3 of 4)

Step 16:   Request the next page.

User enters: A blank response.

System response: Refer to Figure 4-12 (page 4 of 4).

```
ENTER THE FOLLOWING ACCEPTED DATA:
NAME:                              TYPE:
                                   NUMBER
Q-START-DATE

PLEASE ENTER ACCEPTED DATA NOW
```

Figure 4-12. Next Pages
             Display Screen
             (B 1000 Systems)
             (page 4 of 4)

Step 17: Terminate execution of the report program.

User enters: END

System response: Refer to Figure 4-13.

```
END EXECUTION OF "EMPLOY"
NO TERMINAL BACKUP REPORTS HAVE BEEN CREATED
```
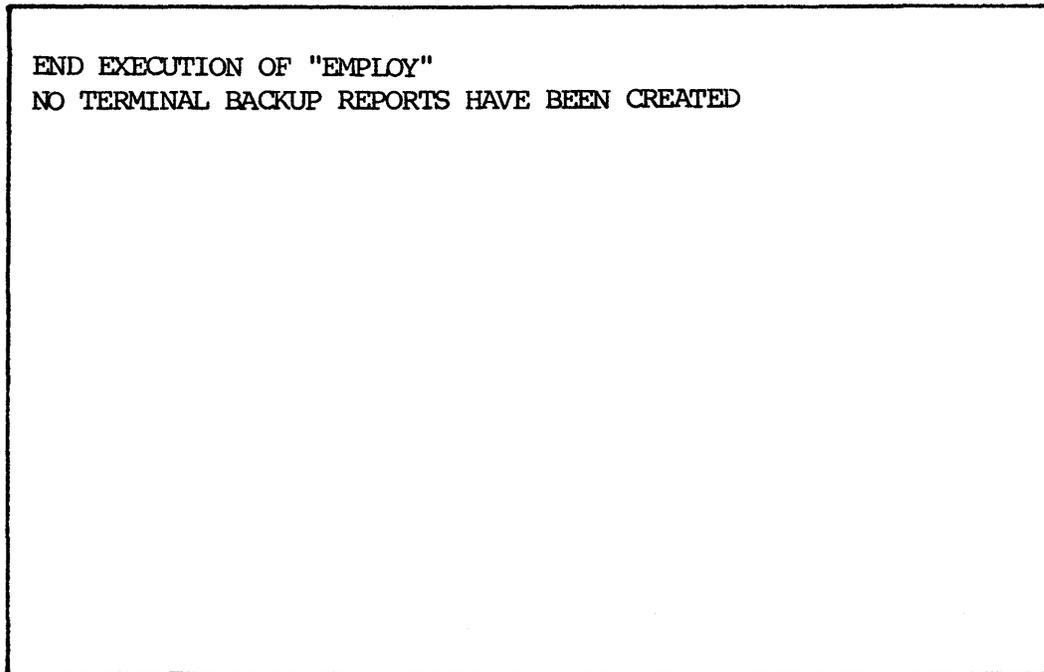
Figure 4-13. End Report Execution
Display Screen
(B 1000 Systems)

Step 18: Terminate the On-Line REPORTER III session.

User enters: BYE

System response: Refer to Figure 4-14.

```
   ***   B  1000   ***

*** ON-LINE REPORTER III ***

    FINISH TIME:        HH:MM:SS
           JOB#:        XXXX
        GOODBYE...
```

Figure 4-14.   BYE Command
               Display Screen
               (B 1000 Systems)

Skip to Example 4 for a demonstration of reporting to terminal backup
files and use of the paging commands.

EXAMPLE 2: B 2000/B 3000/B 4000
SERIES OF SYSTEMS

Step 1:   Execute On-Line REPORTER III.

User enters: SYS OR3REP

System response: Refer to Figure 4-15.

```
┌─────────────────────────────────────────────────────────────┐
│                                                               │
│                                                               │
│                                                               │
│                                                               │
│                                                               │
│                                                               │
│                                                               │
│                                                               │
│                                                               │
│                                                               │
│                                                               │
│                                                               │
│  BEGIN EXECUTION OF B 2000 /B 3000 /B 4000                    │
│        ON-LINE REPORTER III                                   │
│                                                               │
│                                                               │
│                                                               │
└─────────────────────────────────────────────────────────────┘
```
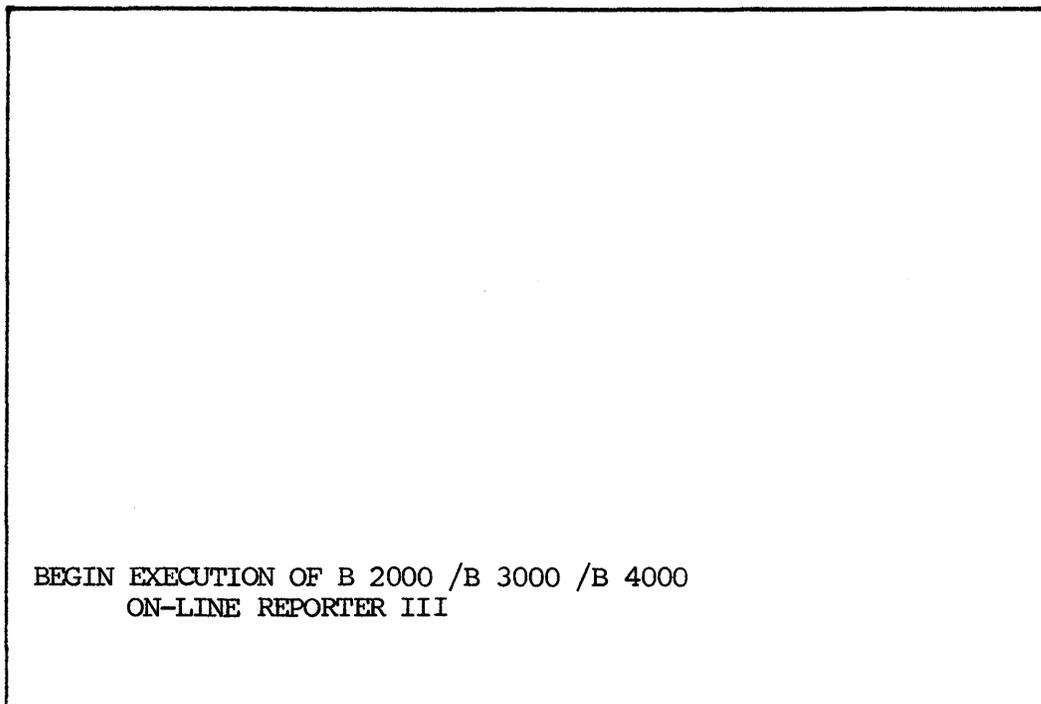
Figure 4-15.   SYS OR3REP
               Display Screen
               (B 2000/B 3000/B 4000 Systems)

Step 2: Run REPORTER III using the specifications file previously created through EDITOR and saved on disk.

User enters: RUN "RP3REP" USING "OR3SPC"

System response: Refer to Figure 4-16.

```
REPORT PROGRAM GENERATION INITIATED
```
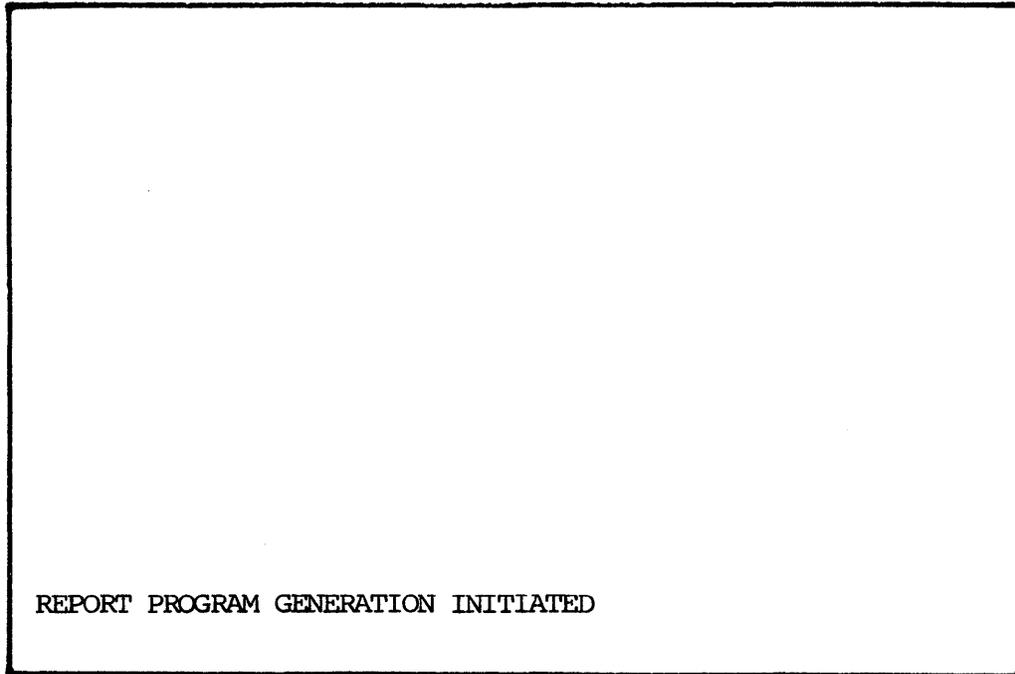
Figure 4-16. RUN REPORTER III
Display Screen
(B 2000/B 3000/B 4000 Systems)

Step 3: Perform a STATUS to determine state of RUN.

User enters: STATUS

System response: Refer to Figure 4-17 (page 1 of 2).

```
BOJ REP
REPORT PAGING NOT IN PROGRESS
```
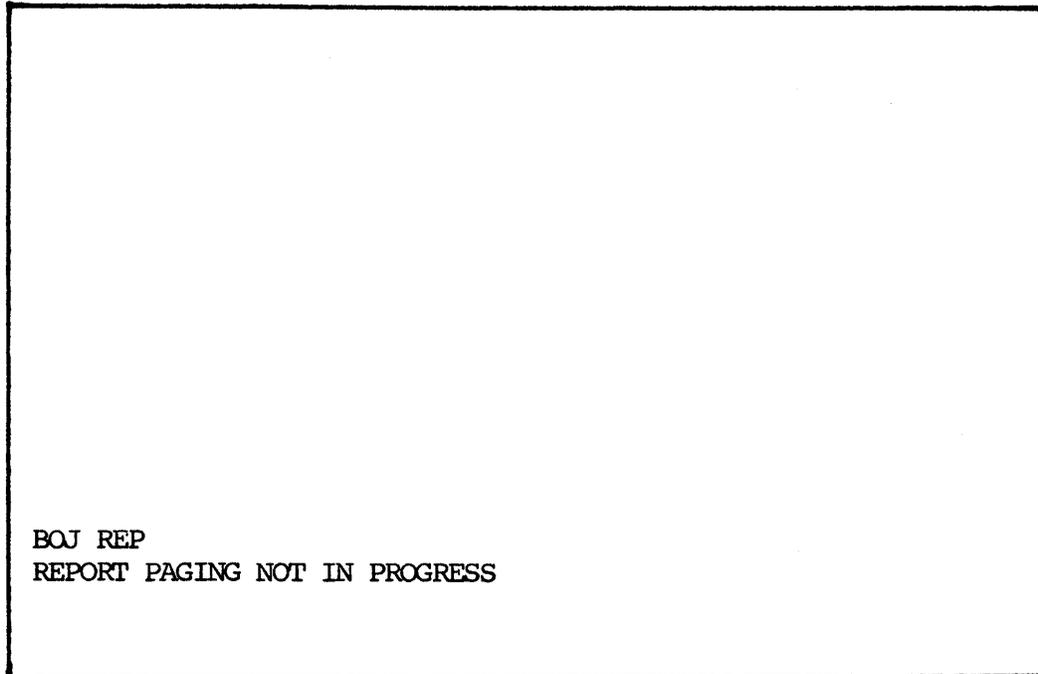
Figure 4-17. STATUS Command
Display Screen
(B 2000/B 3000/B 4000 Systems)
(page 1 of 2)

Step 4:   Continue monitoring status of RUN every minute or so until
         REPORTER III is finished analyzing OR3SPC.

User enters: STATUS

System response: Refer to Figure 4-17 (page 2 of 2).

```
EOJ REP - 001 ERRORS FOUND
DIAGNOSTIC REPORT RDXX CREATED
END OF REPORT PROGRAM GENERATION
REPORT PAGING NOT IN PROGRESS
```

Figure 4-17.   STATUS Command
              Display Screen
              (B 2000/B 3000/B 4000 Systems)
              (page 2 of 2)

RP3REP found syntax errors while analyzing the specifications file. It
is necessary to Read the diagnostic report and correct the errors.

Step 5: Obtain the diagnostic report file to determine what errors are in the specifications file.

User enters: GET "RDXX"

System response: Refer to Figure 4-18.

```
PAGING OF FILE RDXX    IN PROGRESS
REPORT LENGTH IS 00001 PAGES
PAGE SIZE IS 0132 CHARACTERS BY 0060 LINES
```

Figure 4-18.   GET Command
                Display Screen
                (B 2000/B 3000/B 4000 Systems)

The diagnostic report file for On-Line REPORTER III is always a terminal backup file with dimensions that cannot be modified. However, it can be completely examined using the On-Line REPORTER III paging commands and the VIEW command.

Step 6: Examine the diagnostic report to determine the errors.

User enters: FIRST

System response: Refer to Figure 4-19.

```
* * * * * *   B U R R O U G H S   B 2 0 0 0 - B 4 0 0 0   R E P O R

                                        * * * R E P O R T E R   L A


             DATE OF RUN:   MM/DD/YY
             TIME OF RUN:   HH:MM:SS
             RP3REP ID #:   XX


   000100    VOCAB IS "OR3VS1".
             VOCABULARY CREATION DATE IS MM/DD/YY
             VOCABULARY CREATED WITH RELEASE N.NN
             VOCABULARY DICTIONARY IS OR3VS2
   000200    SUPPRESS COBOL.
   000300    SAVE OBJECT AS "EMPLOY".
   000400    ASSIGN ACCEPTED-DATA TO TERM.
   000500    ASSIGN REPORT LISTING TO TERM.
   000600    ACCEPT START-DATE NUMERIC(4).
```

Figure 4-19. FIRST Command
Display Screen
(B 2000/B 3000/B 4000 Systems)

Step 7: Move the view down to see the rest of the page.

User enters: VIEW DOWN 20

System response: Refer to Figure 4-20.

```
      000500     ASSIGN REPORT LISTING TO TERM.
      000600     ACCEPT START-DATE NUMERIC(4).
      000700     SET PAGE-WIDTH TO 80, PAGE-LENGTH TO 24.
      000800     INPUT PERSONNEL.
      000900     SELECT YEAR-EMPLOYED > START-DATE.
      001000     TITLE "EMPLOYEE REPORT: HIREDATE > " START-DATE.
      001100     REPORT DEPT, NAME, YEAR-EMPLOYED.
                            *

*ERROR* 10 PREVIOUS <NAME> UNDEFINED, 'IS' REQUIRED FOR DEFINITION
 TOTAL NUMBER OF ERRORS    IS 001
 TOTAL NUMBER OR WARNINGS IS 000
```

Figure 4-20. VIEW Command
             Display Screen
             (B 2000/B 3000/B 4000 Systems)

A check of the report specifications against the vocabulary specifications reveals that the data item DEPARTMENT should be spelled out rather than abbreviated as DEPT.

Step 8: Now that the error is identified, the diagnostic report is no
         longer needed. Remove it from the disk directory.

User enters: REMOVE

System response: Refer to Figure 4-21.

```
┌──────────────────────────────────────────────────────────┐
│                                                          │
│                                                          │
│                                                          │
│                                                          │
│                                                          │
│                                                          │
│                                                          │
│                                                          │
│                                                          │
│                                                          │
│                                                          │
│                                                          │
│                                                          │
│ FILE RDXX    REMOVED                                     │
│                                                          │
│                                                          │
│                                                          │
└──────────────────────────────────────────────────────────┘
```
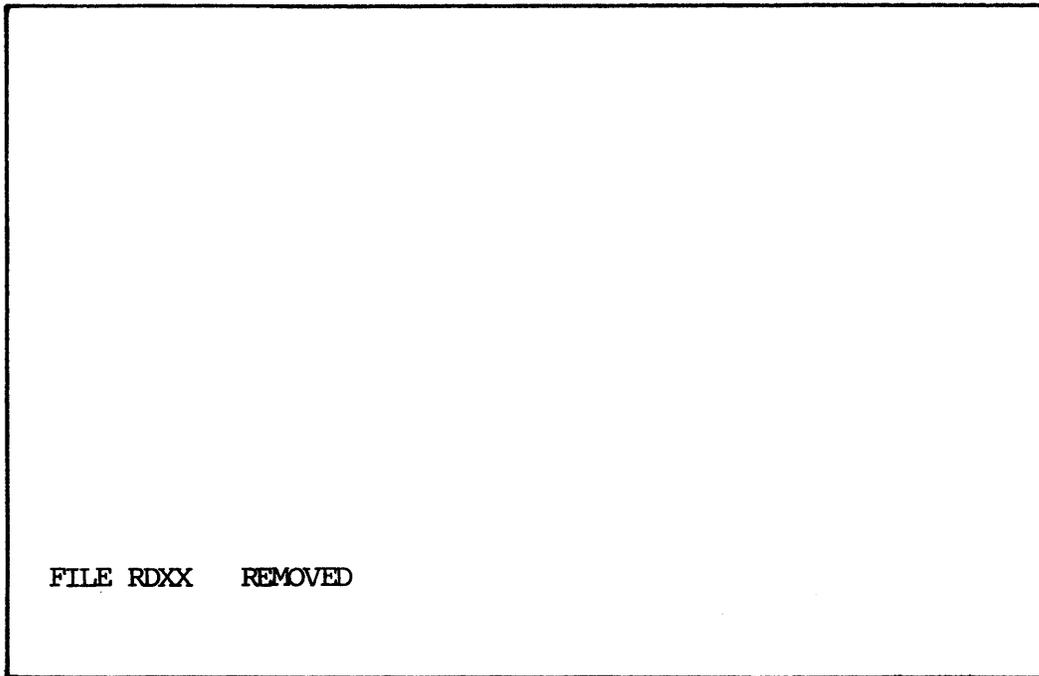
Figure 4-21. REMOVE Command
              Display Screen
              (B 2000/B 3000/B 4000 Systems)

Step 9: Exit On-Line REPORTER III so that changes can be made to the
         specifications file through EDITOR.

User enters: BYE

System response: Refer to Figure 4-22.

```



                 EXECUTION OF B 2000 /B 3000 /B 4000
                 ON-LINE REPORTER III


```
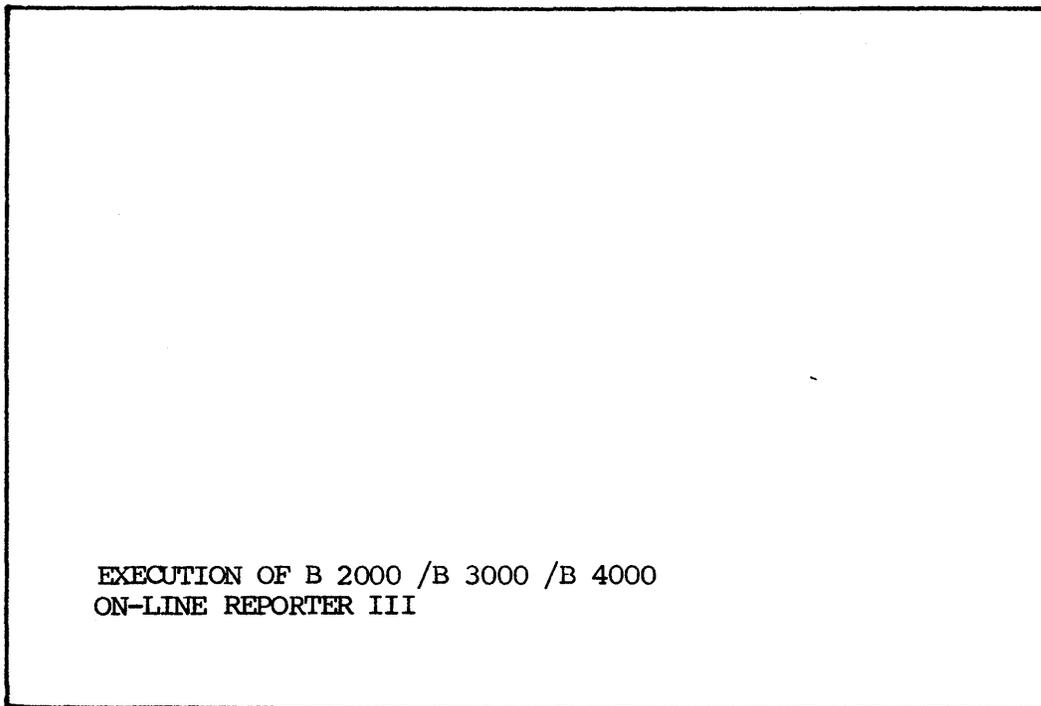
         Figure 4-22.   BYE Command
                        Display Screen
                        (B 2000/B 3000/B 4000 Systems)

EDITOR again has control of the terminal.   Obtain the specifications
file and edit it. When the changes are complete, initiate On-Line
REPORTER III again.

                                NOTE

         The correction to be made is: change DEPT to
         DEPARTMENT   in   OR3SPC   (REPORTER   III   report
         specification file).

Step 10: After reentering On-Line REPORTER III, rerun REPORTER III with
          the corrected specifications.

User enters: RUN "RP3REP" USING "OR3SPC"

System response: Refer to Figure 4-23.

```



REPORT PROGRAM GENERATION INITIATED


```
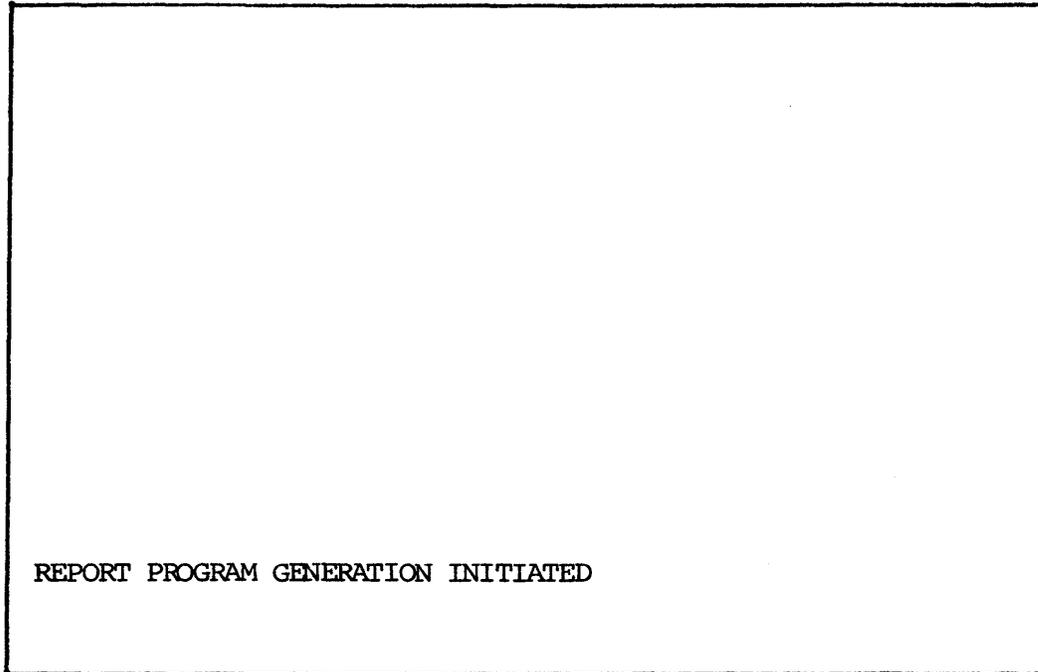
Figure 4-23. RUN Command
              Display Screen
              (B 2000/B 3000/B 4000 Systems)

Monitor the status of the run until the analysis is finished.   Since
there are no more errors, perform a GET and a REMOVE on the diagnostic
report generated in order to free disk space.

Step 11:   Continue to monitor the run until it is complete. During this
           time the user may perform other tasks, such as: paging through
           previously   generated   reports,   running previously generated
           report programs, or paging through the TEACH file.

User enters: STATUS

System response: Refer to Figure 4-24.

```
+------------------------------------------------------------+
|                                                            |
|                                                            |
|                                                            |
|                                                            |
|                                                            |
|                                                            |
|                                                            |
|                                                            |
|                                                            |
|                                                            |
|                                                            |
|  EOJ COBOL - PROGRAM  EMPLOY AVAILABLE FOR EXECUTION       |
|  END OF REPORT PROGRAM GENERATION                          |
|  REPORT PAGING NOT IN PROGRESS                             |
|                                                            |
|                                                            |
|                                                            |
+------------------------------------------------------------+
```
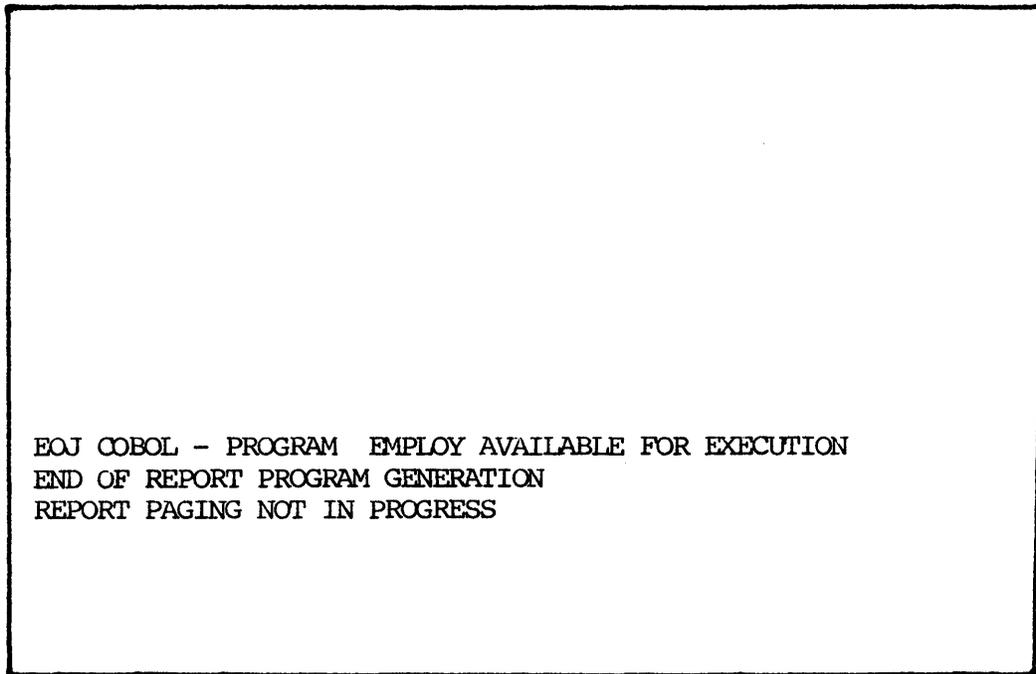
        Figure 4-24.   STATUS Command
                       Display Screen
                       (B 2000/B 3000/B 4000 Systems)

Step 12: Initiate execution of the generated report program.

User enters: RUN "EMPLOY"

System response: Refer to Figure 4-25.

```
EXECUTION OF EMPLOY INITIATED
ENTER THE FOLLOWING ACCEPTED DATA ITEMS

Q-START-DATE                    NUMBER
```

Figure 4-25. RUN Command
              Display Screen
              (B 2000/B 3000/B 4000 Systems)

Step 13:   Enter the requested data item.

User enters: 1969

System response: Refer to Figure 4-26.

```
                                                            PAGE 1
                      EMPLOYEE REPORT: HIRE DATE >   1969


       DEPARTMENT             NAME                         YEAR
                                                          EMPLOYED


       EDP                    BOWERS, FRED H               1970
       SALES                  DEVLIN, ROBERT L             1972
       SUPPORT                DREW, CHESTER L JR           1971
       ENGINEERING            FENTON, PAUL F               1971
       ENGINEERING            FORBES, CAROL A              1970
       SUPPORT                FROST, RICHARD M             1971
       SUPPORT                HALEY, HENRY F               1070
       ENGINEERING            HAWLEY, EDWARD W             1971
       EDP                    KAUFMAN, MAURICE M           1972
       EDP                    LENOX, ANNE S                1971
       SUPPORT                LIBBY, CHERYL J              1970
       SALES                  MARLOW, BARBARA E            1970
       SUPPORT                MC COURT, BERNARD E JR       1970
       ENGINEERING            MC COY, MEREDITH             1972
       SUPPORT                MC CRAY, WILLIE P            1971
       SUPPORT                MC DOUGALL, JAMES F          1971
       SUPPORT                MAC INTOSH, MARGARET A       1971
       ENGINEERING            MAC KAY, DUNCAN R            1972
```

Figure 4-26.   Requested Data Item
               Display Screen
               (B 2000/B 3000/B 4000 Systems)

Step 14: After reading page 1, request the next page.

User enters: A blank response.

System response: Refer to Figure 4-27 (page 1 of 4).

```
                                                           PAGE 2
                        EMPLOYEE REPORT:   HIRE DATE > 1969

                                                            YEAR
          DEPARTMENT              NAME                     EMPLOYED

          ENGINEERING            MAC NEIL, AUDREY            1972
          ENGINEERING            MAC QUEEN, DAVID B          1971
          SUPPORT                MOORE, MARK G               1972
          EDP                    PATTERSON, WILLIAM O        1971
          EDP                    REEVES, PAULINE             1970
          EDP                    SANDERS, ANN                1971
          ENGINEERING            TAYLOR, SHARON F            1970
          SUPPORT                VAN WERT, HELEN R           1970
          ENGINEERING            WEAVER, JANET               1970
          ENGINEERING            WILSON, HAROLD G            1970
          ENGINEERING            WYMAN, EDWIN T JR           1971
          SUPPORT                WYMAN, ELIZABETH C          1972
```

Figure 4-27. Next Pages
              Display Screen
              (B 2000/B 3000/B 4000 Systems)
              (page 1 of 4)

Step 15: Request the next page.

User enters: A blank response.

System response: Refer to Figure 4-27 (page 2 of 4).

```
                                                          PAGE 3
                    EMPLOYEE REPORT:   HIRE DATE > 1969

  SUMMARY OF RECORDS INPUT
       AND SELECTED FROM INPUT

  INPUT SECTION

  PERSONNEL

  RECORDS ACCESSED:            64
  NULL RECORDS ADDED:           0
  TOTAL RECORDS INPUT:         64
  RECORDS SELECTED:            64


  REPORT SECTION 1

  LOGICAL RECORDS

  INPUT:                       64
```

Figure 4-27.   Next Pages
               Display Screen
               (B 2000/B 3000/B 4000 Systems)
               (page 2 of 4)

Step 16: Request the next page.

User enters: A blank response.

System response: Refer to Figure 4-27 (page 3 of 4).

```
                                                        PAGE 4
                EMPLOYEE REPORT:   HIRE DATE > 1969

SUMMARY OF RECORDS INPUT
     AND SELECTED FROM INPUT

SELECTED:                    30

**NUMBER OF EXCEPTIONS:      0
```

Figure 4-27   Next Pages
              Display Screen
              (B 2000/B 3000/B 4000 Systems)
              (page 3 of 4)

Step 17: Request the next page.

User enters: A blank response.

System response: Refer to Figure 4-27 (page 4 of 4).

```
┌─────────────────────────────────────────────────────────┐
│                                                         │
│                                                         │
│                                                         │
│                                                         │
│                                                         │
│                                                         │
│                                                         │
│                                                         │
│                                                         │
│  ENTER THE FOLLOWING ACCEPTED DATA ITEMS                │
│  Q-START-DATE                         NUMBER            │
│                                                         │
│                                                         │
└─────────────────────────────────────────────────────────┘
```

Figure 4-27. Next Pages
              Display Screen
              (B 2000/B 3000/B 4000 Systems)
              (page 4 of 4)

Step 18: Terminate execution of the report program.

User enters: END

System response: Refer to Figure 4-28.

```
┌─────────────────────────────────────────────────────┐
│                                                       │
│                                                       │
│                                                       │
│                                                       │
│                                                       │
│                                                       │
│                                                       │
│                                                       │
│                                                       │
│                                                       │
│                                                       │
│  EOJ - NO TERMINAL BACKUP FILES CREATED              │
│  END OF REPORT PROGRAM EXECUTION                      │
│                                                       │
└─────────────────────────────────────────────────────┘
```
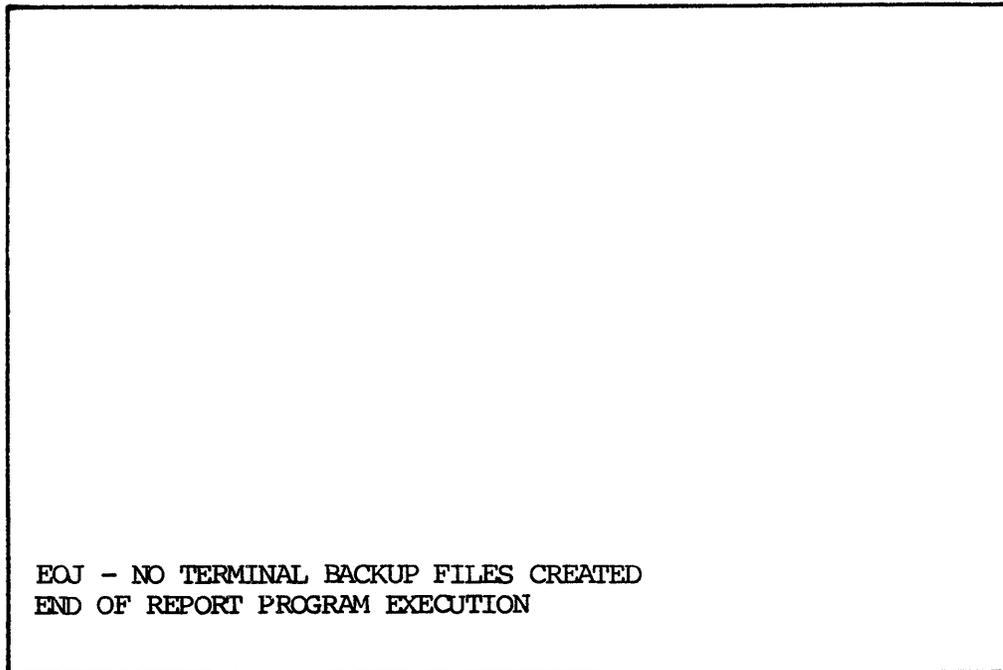
Figure 4-28. End Report Execution
              Display Screen
              (B 2000/B 3000/B 4000 Systems)

Step 19:   Terminate the On-Line REPORTER III session.

User enters: BYE

System response: Refer to Figure 4-29.
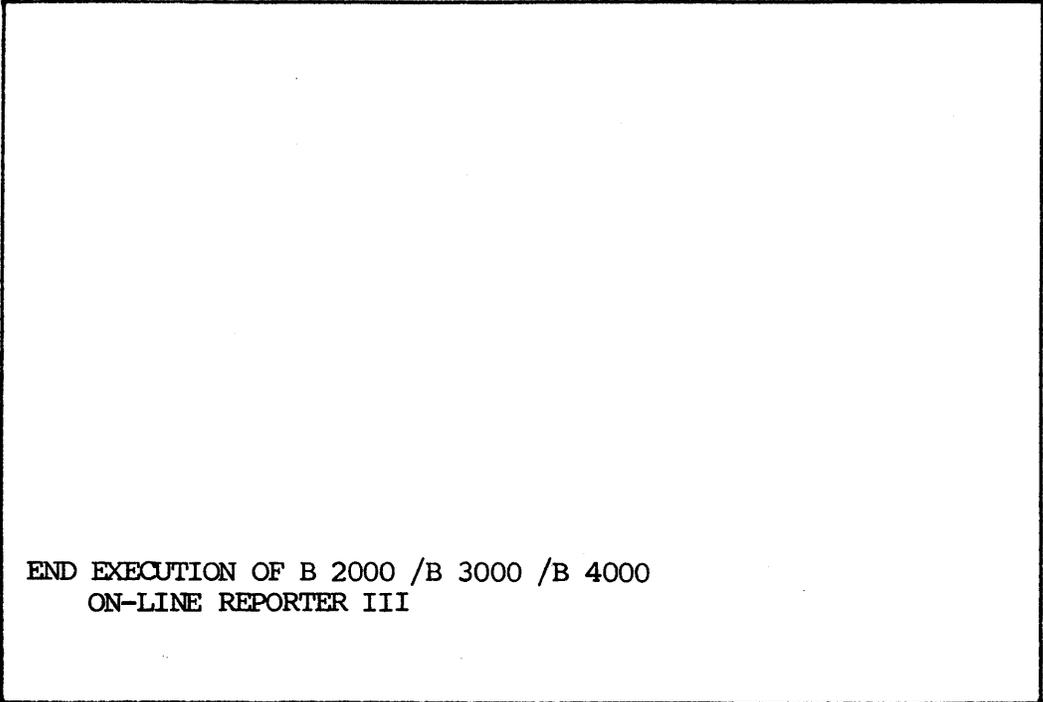
```
END EXECUTION OF B 2000 /B 3000 /B 4000
     ON-LINE REPORTER III
```

Figure 4-29.   BYE Command
                Display Screen
                (B 2000/B 3000/B 4000 Systems)

Skip to Example 4 for a demonstration of reporting to terminal backup
files and the use of the paging commands.

EXAMPLE 3: A SERIES OF SYSTEMS

Step 1:   Initiate execution of On-Line REPORTER III.

User enters: RUN OR3REP

System response: Refer to Figure 4-30.

```
*** B5000-B7000 ON-LINE REPORTER III ***
      START TIME: = HH:MM:SS
      PLEASE ENTER YOUR NAME
--------------------------------------------------------------

PLEASE ENTER YOUR FIRST COMMAND
```

Figure 4-30.   RUN Command
               Display Screen
               (A Series of Systems)

The user should enter a unique name with which On-Line REPORTER III can
associate the messages for this session.   These messages may be
retrieved at any time by use of the MESSAGES command.

Step 2: Run REPORTER III using the specifications file previously saved
         on disk.

User enters: RUN RP3REP USING OR3SPC

System response: Refer to Figure 4-31.

```
BEGIN ANALYSIS OF OR3SPC AT HH:MM:SS




END ANALYSIS OF OR3SPC AT HH:MM:SS -- 001 ERROR(S)
THE FOLLOWING DIAGNOSTIC REPORTS HAVE BEEN CREATED:   RDXX
```

Figure 4-31.   RUN REPORTER III
               Display Screen
               (A Series of Systems)

Step 3: Obtain the diagnostic report file to determine what errors are
         in the specifications file.

User enters: GET RDXX

System response: Refer to Figure 4-32.

```
REPORT FILE NAME     : RDXX
   PAGE LENGTH       : 060 *WARNING:  PAGE LENGTH EXCEEDS
                                      TERMINAL LENGTH.
   PAGE WIDTH        : 132 *WARNING:  PAGE WIDTH EXCEEDS
                                      TERMINAL WIDTH.
   NUMBER OF PAGES   : 00000001
   DATE CREATED      : MM/DD/YY
```

Figure 4-32. GET Command
              Display Screen
              (A Series of Systems)

The diagnostic report file for On-Line REPORTER III is always a terminal
backup file with dimensions that cannot be modified. However, it can be
completely examined using the On-Line REPORTER III paging commands and
the VIEW command.

Step 4: Examine the diagnostic report to determine the errors.

User enters: FIRST

System response: Refer to Figure 4-33.

```
* * * * *    B U R R O U G H S    B 5 0 0 0 - B 7 0 0 0    R E P O

                                 * * * R E P O R T E R  L A


             DATE OF RUN:     MM/DD/YY
             TIME OF RUN:     HH:MM:SS
             RP3REP ID #:     XX


   000100    VOCAB IS "OR3VS1".
             VOCABULARY CREATION DATE IS MM/DD/YY.
             VOCABULARY CREATED WITH RELEASE N.NN.
             VOCABULARY DICTIONARY IS OR3VS2.
   000200    SUPPRESS COBOL.
   000300    SAVE OBJECT AS "EMPLOY".
   000400    ASSIGN ACCEPTED-DATA TO TERM.
   000500    ASSIGN REPORT LISTING TO TERM.
   000600    ACCEPT START-DATE NUMERIC(4).
```

Figure 4-33.   FIRST Command
               Display Screen
               (A Series of Systems)

Step 5: Move the view down to see the rest of the page.

User enters: VIEW DOWN 20

System response: Refer to Figure 4-34.

```
        000500      ASSIGN REPORT LISTING TO TERM.
        000600      ACCEPT START-DATE NUMERIC(4).
        000700      SET PAGE-WIDTH TO 80, PAGE-LENGTH TO 24.
        000800      INPUT PERSONNEL.
        000900      SELECT YEAR-EMPLOYED > START-DATE.
        001000      TITLE "EMPLOYEE REPORT: HIRE DATE > " START-DATE.
        001100      REPORT DEPT, NAME, YEAR-EMPLOYED.
                                    *

*ERROR* 10 PREVIOUS <NAME> UNDEFINED, 'IS' REQUIRED FOR
        DEFINITION

 TOTAL NUMBER OF ERRORS    IS 001

 TOTAL NUMBER OR WARNINGS IS 000
```

Figure 4-34.   VIEW Command
                Display Screen
                (A Series of Systems)

A check of the report specification against the vocabulary
specifications reveals that the data item DEPARTMENT should be spelled
out rather than abbreviated as DEPT.

Step 6:   Now that the error is identified, the diagnostic report is no
          longer needed.   Remove it from the disk directory.

User enters: REMOVE

System response: Refer to Figure 4-35.

```
(<usercode>) RDXX ON <pack name>. REMOVED
```

Figure 4-35.   REMOVE Command
               Display Screen
               (A Series of Systems)

Step 7: Suspend On-Line REPORTER III until the specifications file is
         edited and saved as NEWSPECS.

User enters: SLEEP UNTIL NEWSPECS PRESENT

System response: Refer to Figure 4-36 (page 1 of 2).
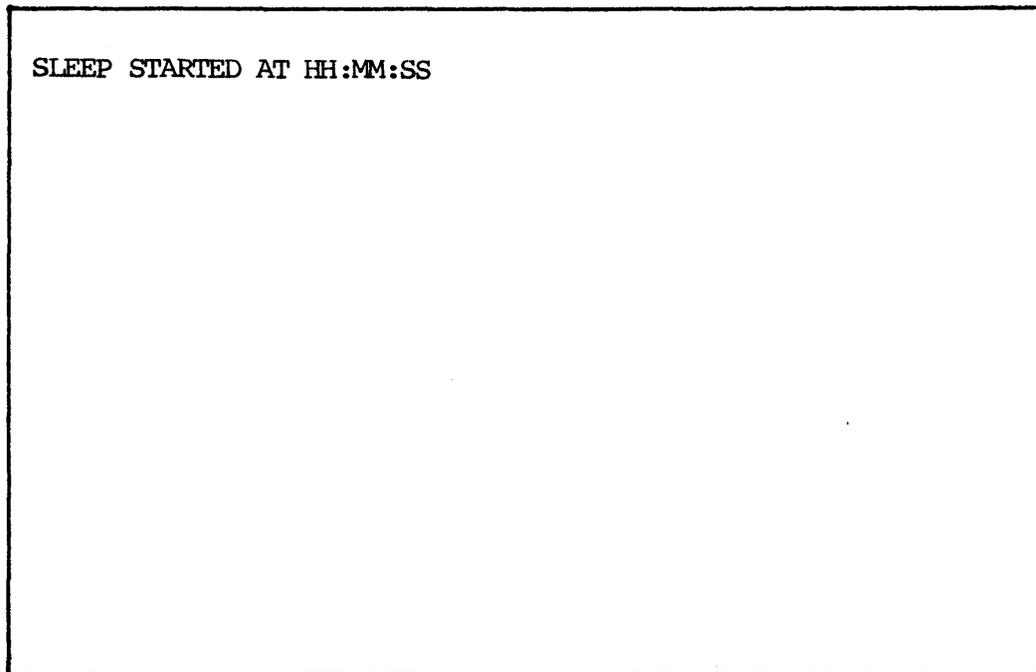
```
SLEEP STARTED AT HH:MM:SS
```

                  Figure 4-36. SLEEP Command
                               Display Screen
                               (A Series of Systems)
                               (page 1 of 2)

CANDE again has control of the terminal.   Use CANDE commands to obtain
the specifications file and edit it. Save the new specifications file
as NEWSPECS and remove the old specifications file to avoid cluttering
the disk. On-Line REPORTER III then automatically awakens.

                                  NOTE

         The correction to be made is: change DEPT to
         DEPARTMENT   in OR3SPC (REPORTER III report
         specification file).

                                4 - 49

System response: Refer to Figure 4-36 (page 2 of 2).

```
NEWSPECS IS PRESENT
SLEEP HAS BEEN TERMINATED AT HH:MM:SS
```

Figure 4-36.   SLEEP Command
Display Screen
(A Series of Systems)
(page 2 of 2)

Step 8: Rerun REPORTER III with the new specifications file.

User enters: RUN RP3REP USING NEWSPECS

System response: Refer to Figure 4-37.

```
BEGIN ANALYSIS OF NEWSPECS AT HH:MM:SS

------------------------------------------------------------------

END ANALYSIS OF NEWSPECS AT HH:MM:SS -- NO ERRORS
THE FOLLOWING DIAGNOSTIC REPORTS HAVE BEEN CREATED: RDXX

------------------------------------------------------------------

BEGIN GENERATION OF "EMPLOY" AT HH:MM:SS
```

Figure 4-37.   RUN Command
               Display Screen
               (A Series of Systems)

Step 9: Since there are no errors in the specifications, the diagnostic report can be ignored, but removing it frees disk space.

User enters: GET RDXX

System response: Refer to Figure 4-38 (page 1 of 2).

```
REPORT FILE NAME    :   RDXX
    PAGE LENGTH      :   060 *WARNING:  PAGE LENGTH EXCEEDS TERM
                                        LENGTH.
    PAGE WIDTH:      :   132 *WARNING:  PAGE WIDTH EXCEEDS TERM
                                        WIDTH.
NUMBER OF PAGES  :   00000001
DATE CREATED     :   MM/DD/YY
```

Figure 4-38.   GET/REMOVE Command
               Display Screen
               (A Series of Systems)
               (page 1 of 2)

Step 10:   Remove the diagnostic report.

User enters: REM

System response: Refer to Figure 4-38 (page 2 of 2).

```
(<usercode>) RDXX ON <pack name>. REMOVED

-----------------------------------------------------------------------

END GENERATION OF "EMPLOY" AT HH:MM:SS

-----------------------------------------------------------------------

START OF COMPILATION OF "EMPLOY" AT HH:MM:SS
```

Figure 4-38.   GET/REMOVE Command
               Display Screen
               (A Series of Systems)
               (page 2 of 2)

Step 11: Inquire about the status of the system.

User enters: STATUS

System response: Refer to Figure 4-39 (page 1 of 2).

```
COBOL IS RUNNING
START TIME HH:MM:SS
CURRENT STATUS: RUNNING
```

Figure 4-39.   STATUS Command
               Display Screen
               (A Series of Systems)
               (page 1 of 2)

System response: Refer to Figure 4-39 (page 2 of 2).

```
END OF COMPILATION OF "EMPLOY" AT HH:MM:SS -- NO ERRORS

_____

BEGIN EXECUTION OF "EMPLOY" AT HH:MM:SS

_____

PLEASE ENTER ACCEPTED DATA NOW.  (AN "END" WILL WRAPUP REPORT).

NO.      ACCEPTED DATA NAME              DATA TYPE

01   Q-START-DATE                        NUMBER
```

Figure 4-39.   STATUS Command
               Display Screen
               (A Series of Systems)
               (page 2 of 2)

Step 12: Enter the requested data item.

User enters: 1969

System response: Refer to Figure 4-40.

ACCEPTED DATA SENT TO: "EMPLOY"

PAGE 1

EMPLOYEE REPORT: HIRE DATE > 1969

DEPARTMENT	NAME	YEAR EMPLOYED
EDP	BOWERS, FRED H	1970
SALES	DEVLIN, ROBERT L	1972
SUPPORT	DREW, CHESTER L JR	1971
ENGINEERING	FENTON, PAUL F	1971
ENGINEERING	FORBES, CAROL A	1970
SUPPORT	FROST, RICHARD M	1971
SUPPORT	HALEY, HENRY F	1970
ENGINEERING	HAWLEY, EDWARD W	1971
EDP	KAUFMAN, MAURICE M	1972
EDP	LENOX, ANNE S	1971
SUPPORT	LIBBY, CHERYL J	1970
SALES	MARLOW, BARBARA E	1970
SUPPORT	MC COURT, BERNARD E JR	1970
ENGINEERING	MC COY, MEREDITH	1972
SUPPORT	MC CRAY, WILLIE P	1971
SUPPORT	MC DOUGALL, JAMES F	1971
SUPPORT	MAC INTOSH, MARGARET A	1971
ENGINEERING	MAC KAY, DUNCAN R	1972

Figure 4-40. Requested Data Item
Display Screen
(A Series of Systems)

Step 13: After reading page 1, request the next pages.

User enters: A blank response.

System response: Refer to Figure 4-41 (page 1 of 4).

```
                                                    PAGE 2
                    EMPLOYEE REPORT: DATE >   1969

                                                    YEAR
    DEPARTMENT              NAME                     EMPLOYED

    ENGINEERING            MAC NEIL,  AUDREY            1972
    ENGINEERING            MAC QUEEN,  DAVID B          1971
    SUPPORT               MOORE,  MARK G               1972
    EDP                   PATTERSON,  WILLIAM O        1971
    EDP                   REEVES,  PAULINE             1970
    EDP                   SANDERS,  ANN               1971
    ENGINEERING            TAYLOR,  SHARON F           1970
    SUPPORT               VAN WERT,  HELEN R           1970
    ENGINEERING            WEAVER,  JANET              1970
    ENGINEERING            WILSON,  HAROLD G           1970
    ENGINEERING            WYMAN,  EDWIN T JR          1971
    SUPPORT               WYMAN,  ELIZABETH C          1972
```

Figure 4-41. Next Pages
              Display Screen
              (A Series of Systems)
              (page 1 of 4)

Step 14: Request the next page.

User enters: A blank response.

System response: Refer to Figure 4-41 (page 2 of 4).

```
                                                        PAGE 3
                 EMPLOYEE REPORT:   HIRE DATE > 1969

SUMMARY OF RECORDS INPUT
     AND SELECTED FROM INPUT


INPUT SECTION

PERSONNEL

RECORDS ACCESSED:        64
NULL RECORDS ADDED:       0
TOTAL RECORDS INPUT:     64
RECORDS SELECTED:        64


REPORT SECTION 1

LOGICAL RECORDS

INPUT:                   64
```

Figure 4-41. Next Pages
              Display Screen
              (A Series of Systems)
              (page 2 of 4)

Step 15: Request the next page.

User enters: A blank response.

System response: Refer to Figure 4-41 (page 3 of 4).

```
                                                    PAGE 4
                    EMPLOYEE REPORT:   HIRE DATE > 1969

    SUMMARY OF RECORDS INPUT
        AND SELECTED FROM INPUT


    SELECTED:                    30



    **NUMBER OF EXCEPTIONS:       0
```

Figure 4-41. Next Pages
              Display Screen
              (A Series of Systems)
              (page 3 of 4)

STEP 16:   Request the next page.

User Enters: A blank response.

System response: Refer to Figure 4-41 (page 4 of 4).

```
PLEASE ENTER ACCEPTED DATA. (AN "END" WILL WRAPUP REPORT).
NO.      ACCEPTED DATA NAME          DATA TYPE

01  Q-START-DATE                         NUMBER
```

Figure 4-41. Next Pages
            Display Screen
            (A Series of Systems)
            (page 4 of 4)

Step 17: Terminate execution of the report program.

User enters: END

System response: Refer to Figure 4-42.

```
┌──────────────────────────────────────────────────────────┐
│                                                          │
│  ACCEPTED DATA SENT TO: "EMPLOY"                          │
│  ──────────────────────────────────────────────────────  │
│                                                          │
│  END EXECUTION OF "EMPLOY" AT HH:MM:SS                    │
│  NO TERMINAL BACKUP REPORTS HAVE BEEN CREATED BY THIS RUN │
│                                                          │
│                                                          │
│                                                          │
│                                                          │
│                                                          │
│                                                          │
│                                                          │
│                                                          │
│                                                          │
│                                                          │
│                                                          │
└──────────────────────────────────────────────────────────┘
```
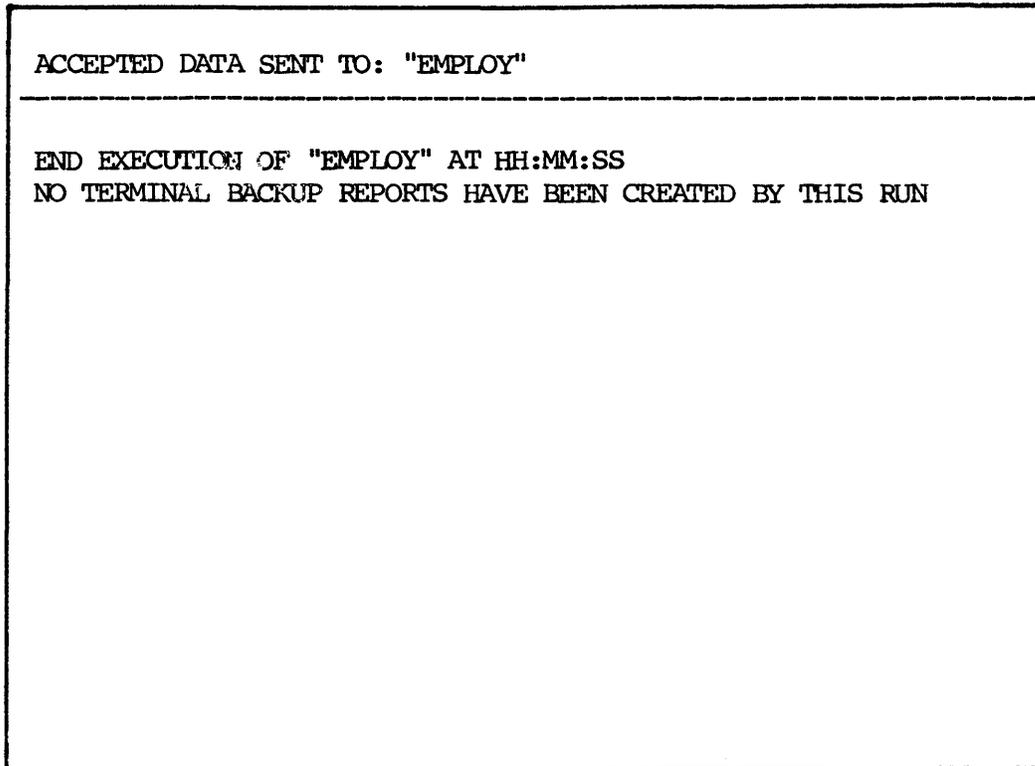
Figure 4-42. End Report Execution
              Display Screen
              (A Series of Systems)

Step 18: Terminate the On-Line REPORTER III session.

User enters: BYE

System response: Refer to Figure 4-43.

```
    ***B5000 - B7000 ***
   ON-LINE REPORTER III

 SESSION ENDED AT:  HH:MM:SS
        GOODBYE!
```

Figure 4-43. BYE Command
              Display Screen
              (A Series of Systems)

Continue with Example 4 for a demonstration of reporting to terminal
backup files and the use of paging commands.

EXAMPLE 4: ALL SYSTEMS

This example should be run after Example 1, 2, or 3 (depending on the system) using the object file EMPLOY created in the previously run example. Example 4 demonstrates the creation of a terminal backup file and the use of the paging commands. Please note that the syntax on the screens may vary slightly from system to system, but the slight difference should not affect the general understanding of this example.

Step 1: Initiate On-Line REPORTER III in the manner shown in the previous examples. A run of a report program should now be initiated with instructions to report to terminal backup.

User enters: RUN "EMPLOY" REPORT TO BACKUP

System response: Refer to Figure 4-44.


```
BEGIN EXECUTION OF "EMPLOY" AT HH:MM:SS

-----------------------------------------------------------------

PLEASE ENTER ACCEPTED DATA NOW

NO.     ACCEPTED DATA NAME     DATA TYPE

01      Q-START-DATE           NUMBER
```


Figure 4-44. RUN Command
             Display Screen
             (All Systems)

4 - 63

Step 2: Enter the requested data item.

User enters: 1959

System response: Refer to Figure 4-45.

```
ACCEPTED DATA SENT TO:  "EMPLOY"


END EXECUTION OF "EMPLOY" AT HH:MM:SS
THE FOLLOWING TERMINAL BACKUP REPORTS HAVE BEEN CREATED BY
THIS RUN:  RLXXXX
```

Figure 4-45.   Requested Data Item
              Display Screen
              (All Systems)

Step 3: Obtain the report file from terminal backup and page through
         it.

User enters: GET "RLXXXX"

System response: Refer to Figure 4-46.

```
REPORT FILE NAME IS:  "RLXXXX"
PAGE LENGTH         :  24
PAGE WIDTH          :  80
NUMBER OF PAGES     :  00000005
DATE CREATED        :  MM/DD/YY
```

Figure 4-46. GET Command
              Display Screen
              (All Systems)

Step 4: Request the first page.

User enters: FIRST

System response: Refer to Figure 4-47.

```
                                                       PAGE 1
                   EMPLOYEE REPORT:   HIRE DATE > 1959

                                                       YEAR
       DEPARTMENT            NAME                       EMPLOYED

       EDP                   ARROM, NANCY R             1960
       SALES                 ALLEN, CLINTON A           1966
       EDP                   BOWERS, FRED H             1970
       SUPPORT               CAPONE, ALFRED B           1966
       SALES                 DEVLIN, ROBERT L           1972
       SUPPORT               DREW, CHESTER L JR         1971
       ENGINEERING           FENTON, PAUL F             1971
       EXECUTIVE-STAFF       FLEMING, PATRICIA E        1965
       SUPPORT               FLETCHER, LEO R JR         1968
       ENGINEERING           FORBES, CAROL A            1970
       SUPPORT               FROST, RICHARD M           1971
       ENGINEERING           GOLDER, STEVE A            1967
       ENGINEERING           GREGORY, WILLIAM H         1963
       SUPPORT               HALEY, HENRY F             1970
       ENGINEERING           HAWLEY, EDWARD W           1971
       EDP                   KAUFMAN, MAURICE M         1972
       SUPPORT               KEYES, DOROTHY M           1969
       EDP                   KRAMER, ARNOLD A           1968
```

Figure 4-47. FIRST Command
               Display Screen
               (All Systems)

Step 5: Request the next page.

User enters: NEXT

System response: Refer to Figure 4-48.

```
                                                        PAGE 2
                     EMPLOYEE REPORT: HIRE DATE >   1959

                                                        YEAR
        DEPARTMENT               NAME                   EMPLOYED

        EDP                      LENOX, ANNE S          1971
        SUPPORT                  LIBBY, CHERYL J        1970
        SALES                    MARLOW, BARBARA E      1970
        EDP                      MC CORMICK, MARY C     1964
        SUPPORT                  MC COURT, BERNARD E JR 1970
        ENGINEERING              MC COY, MEREDITH       1972
        SUPPORT                  MC CRAY, WILLIE P      1971
        SUPPORT                  MC DOUGALL, JAMES F    1971
        SUPPORT                  MAC INTOSH, MARGARET A 1971
        ENGINEERING              MAC KAY, DUNCAN R      1972
        ENGINEERING              MAC NEIL, AUDREY       1972
        ENGINEERING              MAC QUEEN, DAVID B     1971
        SUPPORT                  MOORE, MARK G          1972
        EDP                      MORRIS, WILLIAM A      1966
        SUPPORT                  NEWMAN, SCOTT D        1969
        EDP                      PATTERSON, WILLIAM O   1971
        EDP                      REEVES, PAULINE        1970
        ENGINEERING              ROGER, CHARLES E       1961
```

Figure 4-48. NEXT Command
              Display Screen
              (All Systems)

Step 6: Request page four.

User enters: PAGE 4

System response: Refer to Figure 4-49.

```
                                                                    PAGE 4

                        EMPLOYEE REPORT:   HIRE DATE > 1959

           SUMMARY OF RECORDS INPUT
                 AND SELECTED FROM INPUT



           INPUT SECTION


           PERSONNEL


           RECORDS ACCESSED:         64
           NULL RECORDS ADDED:        0
           TOTAL RECORDS INPUT       64
           RECORDS SELECTED:


           REPORT SECTION 1


           LOGICAL RECORDS

           INPUT:                    64
```

Figure 4-49.   PAGE Command
               Display Screen
               (All Systems)

Step 7: Request the last page.

User enters: LAST

System response: Refer to Figure 4-50.

```
                                                              PAGE 5
                    EMPLOYEE REPORT:  HIRE DATE > 1959


SUMMARY OF RECORDS INPUT
     AND SELECTED FROM INPUT



SELECTED:                      52


** NUMBER OF EXCEPTIONS:        0
```

Figure 4-50.   LAST Command
               Display Screen
               (All Systems)

Step 8: Skip back two pages.

User enters: SKIP BACK 2

System response: Refer to Figure 4-51.

```
                                                           PAGE 3
                      EMPLOYEE REPORT: HIRE DATE >  1959

       DEPARTMENT              NAME                       YEAR
                                                         EMPLOYED


       ENGINEERING            SAND, MICHAEL               1962
       EDP                    SANDERS, ANN                1971
       ENGINEERING            TAYLOR, SHARON              1970
       SALES                  TIFFIN, JOSEPH A            1968
       ENGINEERING            VANGEL, LOUIS D             1968
       SALES                  VAN GELDER, WILLIAM J       1964
       ENGINEERING            VAN HORN, ROBERT G          1961
       SUPPORT                VAN WERT, HELEN R           1970
       ENGINEERING            WEAVER, JANET               1970
       ENGINEERING            WEAVER, JOHN W              1969
       ENGINEERING            WILSON, HAROLD G            1970
       ENGINEERING            WYMAN, EDWIN T JR           1971
       SUPPORT                WYMAN, ELIZABETH C          1972
       ENGINEERING            YATES, JULES DAVID          1967
       SUPPORT                YEAGER, LARRY K             1965
       ENGINEERING            ZELDMAN, IRVING X           1966
```

Figure 4-51. SKIP Command
              Display Screen
              (All Systems)

Step 9: If the user wishes to print a selected portion of the terminal backup file, the TEACH file should be consulted to determine the proper syntax to use, and the selected portion should be printed.

User enters: TEACH PRINT

System response: Refer to Figure 4-52.

```
                                                          PAGE 10

PRINT COMMAND.
THE SYNTAX FOR THE <PRINT COMMAND> IS AS FOLLOWS:

   A            B                     D
   ***>PRINT ********************************************** ->
             *        *            *   * E
             *       **> PAGES **>*    ****> <INTEGER> ***** ->
             * C
             ****> <ON-LINE REPORTER III COMMAND> **** ->
   -> *****************************************************!
         F                              * * H                 *
   -> *****************************>* **ON <PRINTER NAME**
      *G                            * *
      ***> - ***> <INTEGER> **>* *
                                   *
   -> **************************
```

A. THE <PRINT COMMAND> SPECIFIES THAT THE CURRENT REPORT OR
    A PORTION OF THE CURRENT REPORT BE WRITTEN ON THE LINE
    PRINTER. THIS CAPABILITY PROVIDES A PERMANENT COPY OF
    THE REPORT. A <GET COMMAND> MUST BE GIVEN SOMETIME PRIOR
    TO USING THIS COMMAND TO INFORM ON-LINE REPORTER III
    WHICH REPORT IS TO BE ACCESSED.

Figure 4-52.   TEACH PRINT
               Display Screen
               (All Systems)

Step 10: Move the view down to see the remaining portion of the screen.

User enters: *VIEW DOWN

System response: Refer to Figure 4-53.

B. THIS PATH IS TAKEN TO SPECIFY WRITING OF THE CURRENT
    REPORT FILE ON THE LINE PRINTER.

C. THIS PATH IS TAKEN ONLY WHEN USING THE <TEACH PREFIX
    COMMAND> TO LIST ON THE LINE PRINTER A SPECIFIC
    ON-LINE PRINTER A SPECIFIC ON-LINE REPORT   COMMAND
    FROM THE TEACH FILE.

    EXAMPLE:

        *PRINT VIEW

    THIS CAUSES THE PAGES FROM THE TEACH FILE, WITH THE <VIEW
    COMMAND>'S SYNTAX AND SEMANTICS, TO BE WRITTEN ON THE LINE
    PRINTER.

D. THIS PATH IS TAKEN TO SPECIFY THAT THE ENTIRE CURRENT
    REPORT FILE BE WRITTEN ON THE LINE PRINTER.

    EXAMPLE:

        PRINT

    THIS CAUSES THE CURRENT REPORT TO BE PRINTED IN ITS
    ENTIRETY.

E. THIS PATH IS TAKEN TO SPECIFY THAT A CERTAIN PAGE OR RANGE
    OF PAGES BE WRITTEN ON THE LINE PRINTER.

Figure 4-53. *VIEW Command
              Display Screen
              (All Systems)

Step 11: Request the next page.

User enters: *NEXT

System response: Refer to Figure 4-54.

```
G.  THIS PATH IS TAKEN TO SPECIFY THAT A RANGE OF PAGES BE
    WRITTEN.  THE FIRST INTEGER SPECIFIES THE STARTING PAGE,
    AND THE SECOND INTEGER SPECIFIES THE LAST PAGE.  THE
    FIRST INTEGER MUST NOT BE LARGER THAN THE SECOND INTEGER.
    IF EITHER INTEGER IS GREATER THAN THE NUMBER OF PAGES IN
    THE REPORT, THE USER IS INFORMED THAT THE PAGE RANGE DOES
    NOT EXIST AND NO PRINTING IS DONE.

    EXAMPLE:

        PRINT PAGES 10 - 20

    THIS COMMAND CAUSES PAGES 10 THROUGH 20 OF THE CURRENT
    REPORT TO BE WRITTEN ON THE LINE PRINTER.

                        NOTE
        WHENEVER A <PRINT COMMAND> IS SPECIFIED, ON-LINE
        REPORTER III EXECUTES THE PROGRAM "OR3PRT" TO
        PRINT THE REQUESTED PAGES OF THE CURRENT REPORT OR
        TEACH FILE.

H.  THIS PATH IS TAKEN TO SPECIFY THAT A REMOTE PRINTER BE
    USED TO PRINT THE CURRENT REPORT.  THE PRINTER NAME IS
    THE NAME OF THE REMOTE PRINTER THE USER SUPPLIES IN
    THE SYSTEM LITERAL FILE (OR3LIT).  THE REMOTE PRINTER
    DESIGNATION CAN BE USED WITH ANY OF THE PRINT OPTIONS
    DESCRIBED PREVIOUSLY.
```

Figure 4-54.   *NEXT Command
                Display Screen
                (All Systems)

Step 12: Request a hard copy of pages one through three.

User enters: PRINT PAGES 1-3

System response: Refer to Figure 4-55.

```
┌─────────────────────────────────────────────────────┐
│                                                       │
│   PRINTING OF REPORT:   "RLXXXX" INITIATED            │
│                                                       │
│                                                       │
│                                                       │
│                                                       │
│                                                       │
│                                                       │
│                                                       │
│                                                       │
│                                                       │
│                                                       │
│                                                       │
│                                                       │
│                                                       │
│                                                       │
└─────────────────────────────────────────────────────┘
```
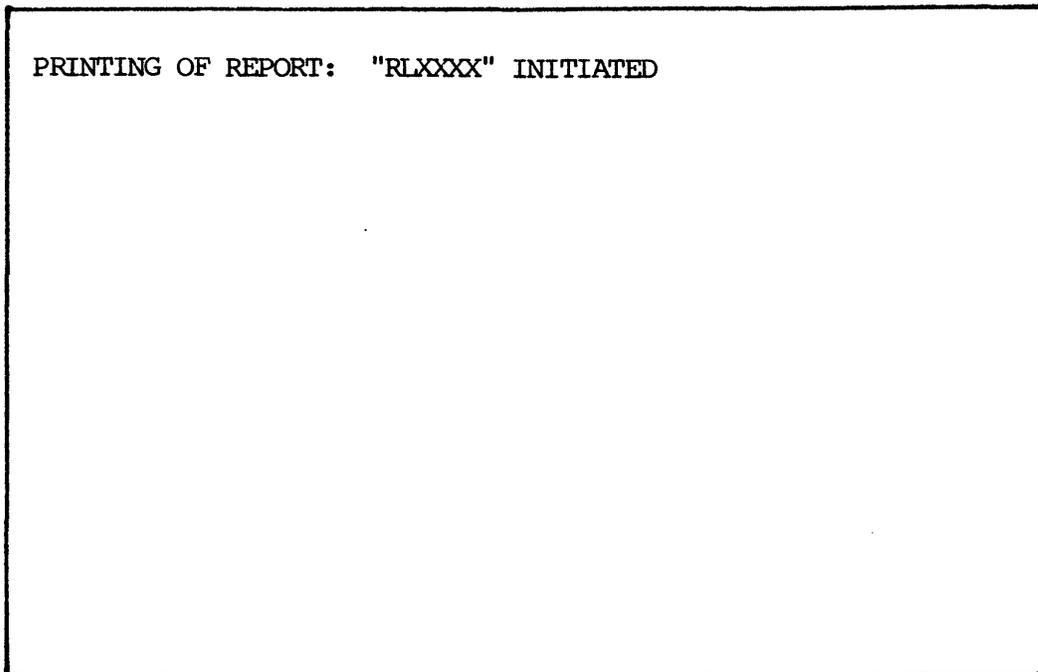
Figure 4-55. PRINT Command
Display Screen
(All Systems)

On-Line REPORTER III initiates the program OR3PRT to print the requested pages of the report.

The user should now complete this session by issuing the BYE command to On-Line REPORTER III.

APPENDIX A

B 1000 OPERATION

This appendix discusses the operation and functional differences of B 1000 On-Line REPORTER III. For a detailed description of each of the features discussed, see Sections 1 through 3.

When using On-Line REPORTER III on a secure system, care must be taken when specifying file names. Running On-Line Reporter III under a usercode limits the file name to a 10-character name. Any directory used in a file name is replaced by the usercode, making the file inaccessible.

When running under SMCS alone, caution should be used with the SLEEP UNTIL <external file name> PRESENT command. The following sequence causes On-Line REPORTER III to wake up, find the terminal to be attached to CANDE, and go into a discontinue (DS) or dump (DP) condition:

1. Putting On-Line REPORTER III to sleep using the UNTIL clause.
2. Coming up on CANDE.
3. Saving the file with the external file name.

This could also happen if On-Line REPORTER III woke up from a timed sleep and found some other program attached to the terminal.

FILES REQUIRED FOR EXECUTION

The On-Line REPORTER III system consists of the following files for handling requests entered through the terminal. The files are supplied on the On-Line REPORTER III System tape (or cartridge) and must be present on disk whenever the On-Line REPORTER III system is to be executed (refer to Table A-1).

Table A-1
Files Required for Execution

File Name	Description
OR3REP	This file contains the object code for the On-Line REPORTER III request analyzer.

OR3PRT   This file contains the object code for the On-Line
                REPORTER III terminal backup printing program.

OR3EOJ   This file contains the object code for the program
                used by OR3REP to detect EOJ conditions.

OR3TCH   This file contains the On-Line REPORTER III TEACH
                information used by OR3REP.

OR3LIT   This file contains the constant literals, key words,
                and messages used by OR3REP. On the B 1000 and A
                Series of Systems, this file also contains the
                printer definition records for remote printing.

In addition to the files indicated above, the following files are
required on disk if the user wishes to follow the examples in Section 4
of this guide (refer to Table A-2).

Table A-2
Additional Files

File Name   Description

OR3VSP   This file contains the vocabular specifications
                file for examples in Section 4.

OR3EMP   This file contains the employee data file that is
                used in conjunction with OR3VSP.

OR3SPC   This file contains the report specifications to be
                run in Example 1.

The REPORTER III System also requires certain files for execution.
These files must be present when OR3REP is executed if the user wishes
to execute portions of these systems (see REPORTER III Report Language
User's Manual).

OR3REP

OR3REP is executed to initiate the On-Line REPORTER III system. This
can be done through the use of a card reader, operator display terminal
(ODT), or remote terminal.

OR3PRT

OR3PRT is executed by On-Line REPORTER III every time a PRINT command is entered into the system. It creates a printer (or printer backup) file containing those pages of the current report (terminal backup file) as input.

OR3EOJ

OR3EOJ is executed by On-Line REPORTER III whenever the user specifies a RUN command that requires the COBOL compiler to be executed. OR3EOJ is scheduled to execute upon the completion of the COBOL compiler. Its sole purpose is to inform the program OR3REP of the completion of the above-mentioned programs. OR3EOJ requires a minimal amount of memory and time during its execution.

OR3TCH

OR3TCH is referenced by OR3REP each time the TEACH command or TEACH PREFIX command is input by the user. It contains the syntax and semantics of the On-Line REPORTER III commands. This file corresponds to Section 3 of this guide. The file is included on the system tape for user convenience; it allows quick and easy on-line reference to details of the On-Line REPORTER III language.

OR3LIT

OR3LIT is the data file which contains all constant messages generated by On-Line REPORTER III. In addition, it contains other information used during an On-Line REPORTER III session, such as key word information and printer definition records for remote printing. For the format of this file, refer to Appendix E.

USING ON-LINE REPORTER III THROUGH CANDE

To run On-Line REPORTER III through CANDE, the user must log onto CANDE with a valid usercode and password. Once logged onto CANDE, the user may do any preparatory processing , such as creating REPORTER III specifications. The next step is to run the On-Line REPORTER III System. This is done by passing an EXECUTE command to the MCP (Master Control Program) through CANDE.

Example:

        ?EX OR3REP; FILE OR3REM NAME <terminal file name>

The <terminal file name> is the name of the terminal as defined in the
NDL (Network Definition Language) for the system.

It is also possible to run On-Line REPORTER III under CANDE through SMCS
by using the following EXECUTE command.

Example:

    EX $OR3REP

Regardless of the method used, at this point, On-Line REPORTER III
displays a HELLO message and asks that the user's name be entered. The
name entered is used to associate the current session with a message
file. A maximum of six characters is allowed in the name.

After the user enters his or her name , the main body of the On-Line
REPORTER III session may be started. When the session is complete, the
user should exit from On-Line REPORTER III and issue a CANDE BYE command
to terminate the CANDE session.

EXECUTION OF OR3REP THROUGH CARD READER

The cards needed for execution of OR3REP through the card reader are the
following:

    1.   ?EXECUTE OR3REP
    2.   ?FILE OR3REM NAME <terminal file name>
    3.   ?END

The ?EXECUTE card instructs the Master Control Program (MCP) to schedule
the object code in file OR3REP for execution.

The ?FILE card equates the internal file name OR3REM (the name by which
the program OR3REP refers to the terminal) to the external file name of
the user's terminal (the name by which the MCP refers to the terminal).

This is necessary for communication between the user at the terminal and the On-Line REPORTER III System.

The ?END card signals the end of the user's input deck.

EXECUTION OF OR3REP THROUGH OPERATOR DISPLAY TERMINAL

Execution of OR3REP through the operator display terminal (ODT) requires the following command.

    EX OR3REP FI OR3REM NAME <terminal file name>

EX instructs the MCP to call the program OR3REP from the library for subsequent execution. The FI control attribute equates the file whose internal file name is OR3REM to the external file name of the user's terminal.

Example:

    EX OR3REP FI OR3REM NAME LSN02

EXECUTION OF OR3REP THROUGH SMCS

If SMCS is the primary MCS, then it is possible to execute On-Line REPORTER III by entering EX OR3REP after ensuring no other program is attached to the terminal.

FUNCTIONAL DIFFERENCES

Following are several functional differences between B 1000 On-Line REPORTER III and the B 2000/B 3000/B 4000 and A Series On-Line REPORTER III.

BYE

If a BYE command is issued while a RUN is not in progress, the action taken is the same as for the B 2000/B 3000/B 4000 and A Series versions of On-Line REPORTER III. However, on the B 1000 Series of Systems, if a BYE command is issued when a RUN is in progress, the following occurs:

1. The final message is sent to the terminal, and all further communications with On-Line REPORTER III are terminated.

2. On-Line REPORTER III continues running until a report is created (or as far as the user specifies). While doing so, messages continue to be stored in the message file. If the report is to be sent to the terminal, or if the report program requires accepted data, On-Line REPORTER III terminates the report program and a report is not created. On-Line REPORTER III then goes to EOJ.

3. When the REPORTER III System completes, the message file is saved. Therefore, if the user wishes to see the history of the previous session, On-Line REPORTER III should be run again, and the RECOVERY MESSAGES command should be given.

RECOVERY MESSAGES

At initiation time for On-Line REPORTER III, a message file is created and maintained to serve as a history for that session. At any time during the session, the user may enter the On-Line REPORTER III MESSAGES command, and all messages in the message file are displayed on the terminal. If the On-Line REPORTER III session goes to normal end-of-job, (a BYE command is issued and a RUN is not in progress) the message file is removed. However, if a BYE command is issued while a RUN is in progress, or if On-Line REPORTER III should end abnormally due to machine failure, the message file is saved on disk. Then, during the next session, by issuing a RECOVERY MESSAGES command, the user is able to see the history of the previous session.

SLEEP

There is one functional difference in the B 1000 On-Line REPORTER III SLEEP command. There is no way to wake up On-Line REPORTER III once it is put to sleep with a time interval, other than waiting for the specified time to expire. For this reason, when using the SLEEP command, it is better to underestimate the sleep time rather than overestimate it.

EXTERNAL FILE NAME <efn>

The syntax for the <efn> is as follows:

```
-------------------------------------> "<file name>" ---> (1)
     |                               |
     |                               |
     +--> "<family name>"   /--> +


  (1) ---------------------------------------------->
         |                              |
         |                              |
         +----->PACK---> "<pack name>" --->+
```
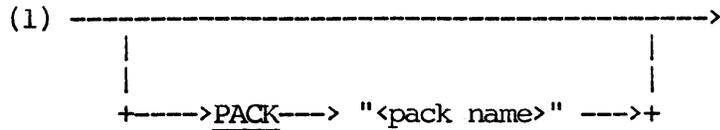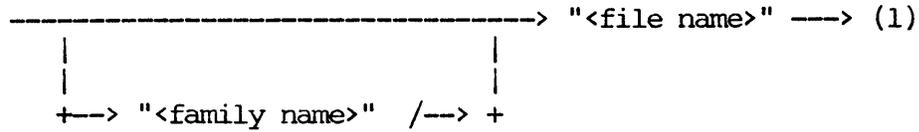
Each name is restricted to 10 characters.

REMOTE PRINTING

The remote print option is available on only the B 1000 and A Series of Systems.

APPENDIX B

B 2000/B 3000/B 4000 OPERATION

A discussion of the operation, functional differences, and file names of the B 2000/B 3000/B 4000 Series of Systems is presented in this appendix.

LOG IN

From a terminal that is not currently logged in, log in by entering the following:

        LI <usercode> <password>; RUN EDITOR

The system responds by displaying:

        LOGGED ON
        BOJ EDITOR

RUNNING ON-LINE REPORTER III

To initiate execution of On-Line REPORTER III, enter the following:

        SYS OR3REP

On-Line REPORTER III responds by displaying:

        BEGIN EXECUTION OF B 2000/B 3000/B 4000
            ON-LINE REPORTER III

Enter On-Line REPORTER III commands to perform the desired functions. Refer to Section 3 of this manual for detailed descriptions of the commands. Terminate execution of On-Line REPORTER III by entering the BYE command. The system displays:

        END EXECUTION OF B 2000/B 3000/B 4000
            ON-LINE REPORTER III

LOG OUT

After terminating execution of On-Line REPORTER III, log out by entering:

    LO

The system responds by displaying:

    LOGGED OUT

FUNCTIONAL DIFFERENCES

Listed here are several functional differences of the B 2000/B 3000/B 4000 Series of Systems from the B 1000 and A Series of Systems.

SLEEP COMMAND

This command is not available for the B 2000/B 3000/B 4000 On-Line REPORTER III.

TEACH PREFIX COMMAND

The TEACH FILE PAGING commands are designated by an "at sign" (@) rather than an asterisk (*) as in the B 1000 and A Series of Systems.

MESSAGES COMMAND

The RECOVERY option of the MESSAGES command is not allowed for the B 2000/B 3000/B 4000 On-Line REPORTER III.

NOTE

On the B 2000/B 3000/B 4000 Series of Systems only,
On-Line REPORTER III messages are best displayed when
the terminal is in scrolling mode (enter ?+S).

RUN COMMAND

The "REPORT TO" clause may be specified only in a report program execution
RUN statement.

While it is possible with the standard product to initiate both report
program generation (REP, GEN, and COBOL74) and report program execution with
a single RUN statement, B 2000/B 3000/B 4000 On-Line REPORTER III requires
one RUN command to initiate report program generation and another to
initiate report program execution.

Status information is not displayed automatically during report program
generation by B 2000/B 3000/B 4000 On-Line REPORTER III. The user must
enter the STATUS or MESSAGE command to receive status information.

After initiation of report program execution, B 2000/B 3000/B 4000 On-Line
REPORTER III cannot process further commands until report program execution
is complete.

While the standard product does not allow report program execution to be
initiated during report program generation, this is allowed by B 2000/B
3000/B 4000 On-Line REPORTER III. However, the user cannot monitor progress
of report program generation (with the STATUS and MESSAGES commands) while
report program execution is in progress.

EXTERNAL FILE NAMES

External file names in B 2000/B 3000/B 4000 On-Line REPORTER III commands
must be from one to six characters in length and enclosed in quotes.

SYNTACTIC ELEMENT LENGTHS

The maximum length of B 2000/B 3000/B 4000 On-Line REPORTER III syntactic elements is 30. This includes alphabetic strings and numeric values but excludes the MCP ZIP STRING which is optional in the RUN statement and is limited only by terminal width.

REMOTE PRINT OPTION

The remote print option is available only on the B 1000 and A Series of Systems.

B 2000/B 3000/B 4000 ON-LINE REPORTER III FILES

Table B-1 below lists the valid files for the B 2000/B 3000/B 4000 On-Line REPORTER III.

Table B-1
File Names for B 2000/B 3000/B 4000

File	Description
OR3REP	This file contains object code for shared-area On-Line REPORTER III.
OR3B	This file contains object code for batch-area On-Line REPORTER III.
OR3PRT	This file contains object code for the On-Line REPORTER III print program.
OR3LIT	This file contains the text of messages displayed by On-Line REPORTER III. The format of this file is described in Appendix E.
OR3TCH	This is a terminal backup file that contains the text of the TEACH messages.
OR3M	This file is used for communication between OR3REP and OR3B. A randomly assigned 2-digit number is placed in the last two positions.

APPENDIX C

A SERIES OPERATION

This appendix discusses the functionally unique characteristics of A Series On-Line REPORTER III. For a detailed description of each of the features discussed, refer to Sections 1-3.

USING ON-LINE REPORTER III

Because On-Line REPORTER III runs through CANDE, the user must log onto CANDE with a valid user code and password. Once logged onto CANDE, the user may do any preparatory processing, such as creating REPORTER III specifications. The next step is to run the On-Line REPORTER III system. This is done by issuing a CANDE RUN command on the program OR3REP.

Example:

    RUN OR3REP

In order to enable the SLEEP command, OR3REP does the following:

1. Obtains the station name.
2. Builds a WFL job deck.
3. Starts the job through the default queue.
4. Ends the program.

This job deck runs OR3REP as a process independent of CANDE. This re-creation may be bypassed by running OR3REP with a value of 1.

EXAMPLE:

    RUN OR3REP; VALUE 1

Running OR3REP in this manner prevents access to CANDE during SLEEP command.

Depending upon the setting of the CANDE option LAISSEZFILE, the following message may appear after the RUN OR3REP.

FILE REM OPEN...

RESPOND "OK" OR "DENY"

This message is for security purposes, and the user should enter "OK" to continue. At this point, On-Line REPORTER III displays a HELLO message and asks the user for his or her name. The name entered is used to associate the current session with a message file.

<div align="center">NOTE</div>

On the A Series of Systems, it is recommended that scrolling not be used with CRT terminals. In the Burroughs standard NDL, scrolling is disabled by entering ?-S.

<div align="center">FUNCTIONAL DIFFERENCES</div>

Listed here are several functional differences between A Series On-Line REPORTER III and the B 1000 and B 2000/B 3000/B 4000 On-Line REPORTER III.

BYE

If a BYE command is issued while a RUN is not in progress, the result is the same as for the B 1000 and B 2000/B 3000/B 4000 versions of On-Line REPORTER III. However, if a RUN is in progress at the time a BYE command is issued, the following occurs:

1. A notification of termination is issued to the terminal. At this time, the terminal is detached from On-Line REPORTER III.

2. On-Line REPORTER III continues to run and monitor the REPORTER III System. Messages continue to be stored in the message file.

3. When the On-Line REPORTER III session is completed, the message file is saved. Therefore, if the user wishes to see the history of the REPORTER III System after the BYE command

is issued, the user simply runs On-Line REPORTER III again and uses the RECOVERY MESSAGES command.

RECOVERY MESSAGES

As On-Line REPORTER III is initiated, a message file is created and maintained to form a history file for that session. At any time during the session, the user may enter the On-Line REPORTER III MESSAGES command, and all messages in the message file are displayed on the terminal. If the On-Line REPORTER III session goes to normal end-of-job (a BYE command is issued and a RUN is not in progress), the message file is removed.

However, if a BYE command is issued while a RUN is in progress, or if On-Line REPORTER III should end abnormally due to machine failure, the message file is saved on disk. During the next session, by issuing a RECOVERY MESSAGES command, the user is able to see the history of the previous session.

SLEEP

There is one functional difference in the B 5000/B 6000/B 7000 On-Line REPORTER III SLEEP command. The user has the ability to wake up the On-Line REPORTER III while it is sleeping. To do this, the user enters:

    ?<mix-no>HI 1

To display OR3REP's <mix-no> on the terminal, enter:

    ?MIX

On-Line REPORTER III terminates its sleeping state and reestablishes communication with the user when it receives the HI command.

Sleep is also terminated if, during the RUN, accepted data is required from the terminal, or a report is coming to the terminal.

EXTERNAL FILE NAMES <efn>

A Series On-Line REPORTER III file names are identical to A Series system file names. Quotes must be used around file names if they contain special characters, but they are optional around file names without special characters. Some examples of valid file names are:

1. A
2. "A-B"
3. "EMPLOYEES"
4. "A"/"B"
5. A/B
6. "A/B"

NOTE

Examples 5 and 6 are different file names. However, Examples 4 and 5 are identical.

All files created by On-Line REPORTER III are under the user code and password of the CANDE session.

REMOTE PRINT OPTION

The remote print option is available only on the B 1000 and A Series of Systems.

FILES USED DURING AN ON-LINE REPORTER III SESSION

Listed here are the files used during an A Series On-Line REPORTER III session.

OR3REP

This is the main-drive program for the On-Line REPORTER III system. It should be executed through CANDE to initiate an On-Line REPORTER III session.

OR3PRT

This is the program which handles all print functions during an On-Line REPORTER III session. It is started automatically by On-Line REPORTER III and runs as an asynchronous, independent process.

OR3LIT

This is the data file which contains all constant messages generated by On-Line REPORTER III. In addition, it contains other information used during an On-Line REPORTER III session, such as key word information and the printer definition records for remote printing. For the format of this file, refer to Appendix E.

OR3TCH

This is the data file which contains the TEACH information.

<Name>/MESSAGES

This is the message file created during an On-Line REPORTER III session. It contains information about the On-Line REPORTER III session, including the running of the REPORTER III System and any files which have been created. This is a CANDE compatible file, and it may be viewed by a CANDE LIST as well as through the MESSAGES command in On-Line REPORTER III. This file is removed at the end of a successful On-Line REPORTER III session, unless a BYE command was given while a RUN was in progress.

TERMINAL BACK-UP FILE

This is the report created by running the On-Line REPORTER III system. It may be viewed using On-Line REPORTER III by issuing a GET command. For the format of this file, refer to Appendix E.

APPENDIX D

RESERVED WORDS

Key words and optional words are included in this appendix. When the beginning portion of a reserved word is underlined in the following list, any abbreviated portion of the word which includes the underlined portion is also a reserved word. The optional words, which can never be abbreviated, are in parentheses.

AND	LAST	RP3REP
	LEFT	RUN
BACKUP	(LINES)	
BACKWARD	(LINE)	SKIP
BDMSCOBOL74*		SLEEP**
BYE	MESSAGES	STATUS
(BY)	(MINUTE)	STOP*
CANCEL	NEXT	TEACH
CHANGE		TERMINAL
(CHARS)	(PAGE)	TO
COBOL	PAGE	
COBOL74	(PAGES)	UNTIL
COBOL85*	(POSITION)	UP
	(POSITIONS)	USING
DOWN	PREVIOUS	
	(PRESENT)	VIEW
FIRST	PRINT	
FORWARD		* (asterisk)
FROM	RECOVERY	@ (at sign) ***
	REMOVE	
GET	REPORT	
	RIGHT	
(IS)	RP3GEN	

----

*   A Series only.
** B 1000 and A Series only.
*** B 2000/B 3000/B 4000 only.

APPENDIX D

RESERVED WORDS

Key words and optional words are included in this appendix. When the beginning portion of a reserved word is underlined in the following list, any abbreviated portion of the word which includes the underlined portion is also a reserved word. The optional words, which can never be abbreviated, are in parentheses.

AND	LAST	RP3REP
	LEFT	RUN
BACKUP	(LINES)	
BACKWARD	(LINE)	SKIP
BDMSCOBOL74*		SLEEP**
BYE	MESSAGES	STATUS
(BY)	(MINUTE)	STOP*
CANCEL	NEXT	TEACH
CHANGE		TERMINAL
(CHARS)	(PAGE)	TO
COBOL	PAGE	
COBOL74	(PAGES)	UNTIL
	(POSITION)	UP
DOWN	(POSITIONS)	USING
	PREVIOUS	
FIRST	(PRESENT)	VIEW
FORWARD	PRINT	
FROM		* (asterisk)
	RECOVERY	@ (at sign) ***
GET	REMOVE	
	REPORT	
(IS)	RIGHT	
	RP3GEN	

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*   A Series only.
**   B 1000 and A Series only.
***   B 2000/B 3000/B 4000 only.

APPENDIX E

FORMAT OF TERMINAL BACKUP AND LITERAL FILES

All reports that are to be accessed by On-Line REPORTER III must be in a compatible format. All such reports and terminal backup files created by REPORTER III are created in that format.

By utilizing the format described below, any user-written program can create terminal backup files which are accessible by On-Line REPORTER III. These reports can be paged through using any of the paging capabilities available in On-Line REPORTER III.

FORMAT DESCRIPTION OF TERMINAL BACKUP FILE

Listed here is the format description of the terminal backup file.

1. Record size: 140 bytes

2. Block size:

    a. For B 1000 and A Series: Any size (9 or a multiple of 9 is most efficient).

    b. For B 2000/B 3000/B 4000: Must be 9.

3. File size: Maximum 9,999,999 records.

GENERAL FORMAT OF FILE

Listed here is the general format description of the terminal backup file.

Table E-1
Terminal Backup File Format

Record Number	Description
1	Control record
2-11	Embedded Pages table
12-21	Index table record for first 200 pages
22-n	Pattern page
n+1 - m	First 200 pages of report (Report records)
m+1 - m+10	Index table record for next 200 pages
m+11 - p	Next 200 pages report

etc.

FORMAT OF CONTROL RECORD

The control record contains global information about the report and is used by On-Line REPORTER III for validation of the report, security, terminal formatting, and user-status requests. The format is shown in Table E-2.

Table E-2
Control Record Format

Field	Type - Usage	Length
1. Report Name	Byte - Display	30 Bytes
2. Date Created:		
a. Month	Byte - Display	2 Bytes
b. Day	Byte - Display	2 Bytes
c. Year	Byte - Display	2 Bytes
3. Report Page Width	Digit - Comp.	3 Digits
4. Report Page Length	Digit - Comp.	3 Digits
5. Report Last Page No.	Digit - Comp.	8 Digits
6. Embedded Pages Table Length	Digit - Comp.	2 digits
7. Special Forms Flag	Digit - Comp.	1 Digit
8. Channel Flag	Digit - Comp.	1 Digit
9. Channel Number/Number of Lines	Digit - Comp.	4 Digits
10. Test Pattern Length	Digit - Comp.	3 Digits
11. No. of Test Patterns	Digit - Comp.	3 digits
12. Filler	Byte - Display	74 Bytes
13. Release Number	Byte - Display	6 Bytes
14. Password	Byte - Display	10 Bytes
	Total:	140 Bytes

Description of Fields

Listed here is the description of the fields in the format of the control record.

1. Report Name is the name of the report that is displayed to the user when a STATUS is requested.

2. Date Created is the date of creation in calendar format.

3. Report Page Width is the maximum number of characters per line of the report.

4. Report Page Length is the maximum number of lines per page of the report.

5. Report Last Page No. is the last page of the report.

6. Embedded Pages Table Length is the number of records which are in the Embedded Pages table. On-Line REPORTER III uses this field when calculating the starting location of the first Index Table record and the start of the Pattern page. For terminal backup files generated by the REPORTER III System, the Embedded Pages table consists of 10 records.

7. Special Forms Flag indicates whether the report being sent to the line printer is to be printed on special forms. Special Forms flag is false if zero, true if nonzero.

8. Channel Flag indicates whether the skip between report pages on the line printer is accomplished by skipping to a carriage control channel or by skipping blank lines. If Channel flag is zero, blank lines are skipped; if non-zero, skip is to a channel number.

9. Channel No./No. of Lines indicates the channel number or the number of lines to skip between pages when printing the report on the line printer. Whether this field refers to a channel number or to number of lines is determined by the value of the Channel flag.

10. Test Pattern Length is the number of records used to store the test pattern in the terminal backup file. If there is no test pattern for this report, this field should be zero.

11. No. of Test Patterns is the number of test patterns that can precede the first report page when sending report pages to the line printer. If there is no test pattern for this report, this field should be zero.

12. Filler presently contains no useful information but is reserved for future implementation or enhancements.

13. Release No. is a literal used by On-Line REPORTER III to verify that the report is a terminal backup file. The value of this literal is used by On-Line REPORTER III to verify that the report is a terminal backup file. The value of this

literal must be "OR3nnn" where nnn is a valid version number of the terminal backup file format.

14. Password is used for security checking by On-Line REPORTER III. If this field contains all spaces, no security checking is performed. Otherwise, the user is requested to supply this password when a GET is performed on this report.

FORMAT OF EMBEDDED PAGES TABLE RECORDS

The Embedded Pages table records contain the record indices of the start of each Embedded Index table in the report file in the following format.

Table E-3
Embedded Pages Table Records Format

Field	Type - Usage	Length
Embedded Pages Table Keys (40 occurrences)	Digits - Comp.	7 Digits (7x40 = 280 Digits)
Total:		140 Bytes

If the report contains 200 pages or fewer, the Embedded Pages table is not used, since the first index table always starts at record EMBEDDED PAGES TABLE LENGTH + 2. For each additional increment of 200 pages, an Embedded Index table is required. Each record of the Embedded Pages table contains the starting addresses (embedded table keys) of up to 40 Embedded Index tables, allowing for indexing of up to 8,000 pages per Embedded Pages table record. For example, if the report contains 10,000 pages, then 49 embedded table keys are required. The first 40 keys reside in the first Embedded Pages table record, and the next nine keys reside in the first Embedded Pages table record. Each Embedded Index table immediately precedes the 200 report pages to which it points.

The terminal backup file created by the REPORTER III System always contains 10 records in the Embedded Pages table. The maximum number of pages for a report is 200.

NOTE

This is an upper limit on number of pages only, and the terminal backup file created by the REPORTER III System is also constrained by a file-size limit of a maximum 100,000 records (100 areas x 1000 records/area).

A user-created terminal backup file may contain between 100,000 records and 9,999,999 records by using an area size greater than 1000 records/area.

FORMAT OF INDEX TABLE RECORDS

All index table records are identical whether embedded or not. The first (nonembedded) index table is always required for the first 200 pages of the report. Additional (embedded) index tables are required only when the report exceeds 200 pages. Each index table consists of 10 records.

Table E-4
Index Table Records Format

Field	Type – Usage	Length
Page Addresses (20 occurrences)	Digit – Comp.	14 Digits (14x20 = 280 Digits)
Page Start Address	Digit – Comp.	7 Digits
Page End Address	Digit – Comp.	7 Digits
		————————
	Total:	140 Bytes

Page Address contains the address of the first line and last line of each page in the report. For each index table there are 10 records, each of which contain addresses of 20 pages, thus totaling 200 pages per index table. The table should be filled in the normal left-to-right, top-to-bottom order.

Page Start Address (I) is the address of the first line of page I within this index table record, where I ranges from 1 to 20. Page End Address

(I) is the address of the last line of page I within this index table record where I ranges from 1 to 20.

FORMAT OF REPORT RECORDS

Report records must be stored in the file exactly as they are to be viewed. If blank lines (for double spacing) occur in the report, they must be stored as blank lines. Each group of 200 report pages should be stored with no breaks between pages.

Table E-5
Report Records Format

Field	Type - Usage	Length
Report Text	Byte - Display	132 Bytes
[Filler]	Byte - None	8 Bytes
Total:		140 Bytes

Report Text contains an actual line of one of the pages of the report. If the report page width is less than 132 characters, it must be left-justified. The maximum length for a line of text is 132 characters.

The 8-byte filler serves only to make the record length total to 140 bytes.

All record addresses should be stored, bearing in mind that the first record in the file has address 1. This is the standard COBOL disk file addressing format.

FORMAT OF LITERAL FILES (OR3LIT)

Literal files can take one of two formats. One format is provided initially with the On-Line REPORTER III product. It is used for constant message storage and for the line printer option. The other format is used when the remote printer option is desired. It is derived from modifying the initial format. The initial format, modification procedure, and remote printer format are described below.

OR3LIT is the literal constant file used by On-Line REPORTER III during a session. All constant messages used by On-Line REPORTER III are stored here, as well as key word information. The format of a record in OR3LIT is:

    Bytes 1 - 3 = Length of text
    Bytes 4 - 80 = Text

Example:

    026***On-Line REPORTER III***

On-Line REPORTER III key words are also stored in the OR3LIT file. They are kept in the same format; however, at the end of the text they contain a 2-byte number which specifies the minimum length of that key word.

Example:

    008TERMINAL04

In this example TERMINAL is the key word, but only the first four characters are required.

OR3LIT is a CANDE data file and may be altered by the user. However, caution must be used to keep the records in the proper sequence and in their proper order in the file.

The second record in OR3LIT contains a numeric variable. This numeric variable governs the time that OR3REP waits during its monitoring loop. For example, if the second record of OR3LIT contains 003002..., OR3REP waits two seconds while monitoring the REPORTER III System.

FOR REMOTE PRINTING

The remote printing option is available only on the B 1000 and A Series of Systems.

To use the remote printing option, the data provided in the literal file must be modified to specify the type of remote printer used, the user's designation of the printer name, and other variables.

There are two different procedures for modifying the OR3LIT file depending on whether the B1000 or A Series of Systems is used.

On the B 1000 Series of Systems, the printer definition records are added to the end of the literal file through CANDE. However, when CANDE is used, a blocking factor in the file is changed. To correct the blocking factor, do the following.

Enter:

EXECUTE DMPALL

System Response:

ENTER SPECS <MIX NUMBER> ACCEPT

Enter and transmit:

AX PFM DSKDSK OR3LIT 80 20 OR3LIT 80 1

System Response:

ENTER SPECS

Enter and transmit:

<MIX NUMBER> AX

The system will then go to EOJ.

This procedure restores the blocking factor to its initial state and adds the new records in a compatible format.

On the A Series of Systems, the printer definition records are simply added to the end of the literal file through CANDE. Make sure the records are in the proper sequence and that any required place holders are included.

The format of the modified literal file for both the B 1000 and A Series of Systems is:

Field Value	Byte	Description
Length of text	1 - 3	
Printer name	4 - 13	A user-specified name which can be any alphanumeric combination up to 10 characters in length. It cannot be a keyword. On the B 1000 Series of Systems only, the name cannot end in an integer (for example, Printer1 is not a valid name).
Printer station name	14 - 30	For A Series of Systems, a valid AP printer station name defined in the Network Definition Language (NDL). On the B 1000 Series of Systems, a valid file name defined in the file section of the NDL, which is associated with the desired remote printer.
Printer type	31 - 34	Valid printer values are: 300 to specify AP300. 1340 to specify AP1340. 1300 to specify AP1300/1301/1302. blanks to specify TTY printer.
Lines/inch (LPI)	35	Specifies the number of lines per inch to print. Valid values are 6 and 8 for all types of AP

printers. Blanks will default to
a value of 6 LPI.

Characters/ inch (CPI)   36 - 37   Specifies the number of
characters per inch to print.
Valid values are:

12 and 16 for AP300 printers.

10, 12, or 16 for AP1300 and
AP1340 printers.

Blanks will default to 12 CPI for
AP300 printers and to 10 CPI for
AP1300 an AP1340 printers.

Form size   38 - 39   The size of the printer paper in
(in inches)   inches. Valid values are:

1 - 15 for AP1300.

1 - 41 for AP300 amd AP1340
printers.

Example:

        039PRINTERAXXAP21XXXXXXXXXXXXXX130081211

This example illustrates that the printer name is PRINTERA, the printer
station name is AP21, the printer type is an AP1300, lines per inch is
8, characters per inch is 12, and paper size is 11 inches.   In this
example, an "X" represents a blank. Note that blanks are inserted in
any field name that does not require the bytes allocated to it.

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