TEXT FORMATTER (FORMS)

HOME MANAGEMENT

A basic text formatter for use with a text editor
(ages 16 and up)

by Dale Yocum

Requires: ATARI BASIC Language Cartridge
ATARI 825 80-Column Printer

Cassette version (2):	ATARI 410 Program Recorder
(APX-10002)	16K RAM
Diskette version (1):	ATARI 810 Disk Drive
(APX-20002)	24K RAM

Edition B

CONSUMER-WRITTEN PROGRAMS FOR

ATARI
HOME COMPUTERS

APX
ATARI Program Exchange

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Distributed By

The ATARI Program Exchange
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Introduction

Welcome to the world of word processing! Once you experience it, you'll never want use a typewriter again. In fact, you might as well give yours to the kids for keyboard practice so they can use your computer when they're older. Or, you can donate it to your favorite charity, if you can find a charity that still uses typewriters.

Now you can alter your layout as much and as often as you like without having to retype your text. Such a tool might even remove an occasional writer's block!

With FORMS and either a line-oriented or full-screen text editor, you can create reports, letters, novels, or any other printed matter as quickly as your thoughts spill out on the keyboard. (These instructions explain how to use both kinds of text editors with FORMS.) And if you're like many users, you'll even start enjoying formerly boring or formidable writing tasks.

The procedure is simple. First, you load your text editor and create your input file of text. You intersperse FORMS control words in this file to indicate whatever formatting you want. For example, you enter the control word .I5 on a line to indent subsequent text five spaces from the left-hand margin. Next, you store your file on diskette or cassette. Then, to print a formatted copy of your file, you load FORMS and specify the name of your input file in response to a prompt. That's all there is to it! FORMS takes over and prints your formatted text. Whenever you want to revise your input file, you follow the same procedure, except that you load in your existing file after loading in your text editor.

All FORMS control words consist of a period in column one, followed by an uppercase or lowercase letter (FORMS accepts both), and sometimes by a number. You enter one control word per line, and usually your control words are on separate lines from your text. Some of the formatting possible via FORMS incudes specifying page height, line spacing, line length, left-hand margin, paragraph indention, running top title, text centering, and escape codes to change character sets on the ATARI 825 Printer. You can also change many of these settings at any point in your text. Thus, for example, you can double-space the body of your text but indent and single-space quotations.

3

At the point of printing a copy, FORMS asks you whether you want to print your entire document (data file) or only selected pages. This feature is very convenient when you revise only one section or a few pages of a large document. Another control word permits FORMS to support both separate sheets and continuous forms.

Experience has shown that, although users start out using very simple formatting to become familiar with a text formatter, sooner or later they turn to some of the formatter's fancier features. FORMS has enough control words to give you lots of ways to experiment! FORMS together with a text editor constitutes a good all-purpose word processing package. These user instructions were formatted through FORMS and printed on an ATARI 825 80-column printer.

REQUIRED ACCESSORIES

    ATARI BASIC Language Cartridge
    A compatible text editor
    ATARI printer or equivalent printer

    Cassette version

        16K RAM
        ATARI 410 Program Recorder

    Diskette version

        24K RAM
        ATARI 810 Disk Drive

A sample session using the ATARI Assembler Editor cartridge

Before describing the FORMS control words and features in detail, let's run through a sample session. We'll create a text file using the ATARI Assembler Editor cartridge and store the file on diskette.

After turning on our disk drive, we insert the Assembler Editor cartridge, turn on our computer, and insert the diskette on which we want to store our file at the end of the session.

The Assember Editor program uses a line-oriented text editor, and so we'll type NUM to cause the editor to generate a line number for each line of text. Next, we key in our text. The sample appears on the next page.

Sample input file

```
10 .W75
20 .BTEST FILE
30 .P
40 The text file, created using a
50 separate editor, contains both textual
60 material, plus special control words to
70 the FORMS program.
80 A line beginning with a period is
90 assumed to be a control word and must match
100 one of the control words recognized by FORMS.
110 An example is:
120 .L1
130 .I15
140 Indent this line 15 spaces
150 .L1
160 .I0
170 and then return to no indention.
180 .d0
190 .l1
200 .i5
210 .e17
```

The output file would then look like this:

TEST FILE

The text file, created using a separate editor, contains both textual
material, plus special control words to the FORMS program. A line
beginning with a period is assumed to be a control word and must match
one of the control words recognized by FORMS. An example is:

Indent this line 15 spaces

and then return to no indention.

In this sample, we used the control word .W to set the right margin at
column 75 and .B to center a title using an elongated character set
available on the ATARI 825 printer. Next, we used the control word .P
to create a paragraph that skips one line and indents five spaces. Then,
midway through the paragraph, we used the control word .L1 to skip 1
line and the control word .I15 to indent some text. After the indented
line, we skipped another line with .L1 and we used .I0 to reset our
regular left-hand margin to its former column position.

If this were all we wanted to write today, we would then store it on cassette or diskette. Since we're using the Assembler Editor cartridge, we'll use the command LIST#D:SAMPLE to name and store our sample file on diskette.

We're now ready to print a formatted copy of the file. We turn on our printer and interface module. Because we have the diskette version of FORMS, we load it into RAM by typing RUN "D:FORMS" and pressing the RETURN key. FORMS first prompts us for the name of our text file:

<div align="center">TEXT FILE NAME?</div>

We respond by entering the name, SAMPLE in this case. Next, FORMS asks us on what printed page number we want to begin printing:

```
WHAT PAGE SHALL I START PRINTING
WITH (HIT RETURN TO PRINT ENTIRE
DOCUMENT)?
```

Obviously, our sample will fill only part of the first page, so we can simply press the RETURN key to cause FORMS to print the entire file. FORMS then formats and prints our input file. You'll see the input file scroll on your TV screen as FORMS reads through your file.

At the end of the video display, FORMS lists the number of SOURCE ERRORS encountered in the file. These are lines that began with a period, alerting FORMS to a control word, but that FORMS couldn't understand or carry out. In addition, if our text contains text formatting errors, in each instance FORMS prints (and also displays on the TV screen) the last control word it read and then prints the SOURCE ERROR message. For example, if you type .lO (the letter "O") instead of .l0 (the number zero) to reset your left-hand margin, then FORMS displays the message:

```
*** SOURCE ERROR, LAST COMMAND: ***
*** .lO ***
```

Those are the steps for using FORMS with a line-oriented text editor. Using a full-screen text editor involves the same steps, except our text lines don't begin with line numbers. For more information about these two types of text editors, see the section titled "USING LINE-ORIENTED AND FULL-SCREEN TEXT EDITORS" later in this manual.

A sample session
using the ATARI Program-Text
Editor

Before describing the FORMS control words and features in detail, let's run through a sample session. We'll create a text file using the ATARI Program-Text Editor diskette (APX-20075 or APX-20076) and store the file on the same diskette.

After turning on our disk drive, we insert the ATARI Program-Text Editor diskette and turn on our computer. Next, we type DOS to see the Disk Operating System menu. Choose L. (BINARY LOAD) and the prompt

                    LOAD FROM WHAT FILE

appears. We type MEDIT and press the RETURN key. The Text Editor is now stored in computer memory and we see the prompt

                         FILENAME?

We type the name of our file, using the device initial (D) if there's more than one disk drive. Press the RETURN key.

Now, we key in our text. The sample appears on the next page.

SAMPLE INPUT FILE

```
.W75
.BTEST FILE
.P
,The text file, created using a separate editor, contains both
textual material, plus special control words to
the FORMS program. A line beginning with a period is assumed
to be a control word and must match one of the
control words recognized by FORMS. An example is:
.l1
.i15
,Indent this line 15 spaces
.l1
.i0
,and then return to no indention.
```

The output file would then look like this:

TEST FILE

The text file, created using a separate editor, contains both
textual material, plus special control words to the FORMS
program. A line beginning with a period is assumed to be a
control word and must match one of the control words recognized
by FORMS. An example is:

    Indent this line 15 spaces

and then return to no indention.

In this sample, we used the control word .W to set the right margin at
column 75 and .B to center a title using an elongated character set
available on the ATARI 825 printer. Next, we used the control word .P
to create a paragraph that skips one line and indents five spaces. Then,
midway through the paragraph, we used the control word .L1 to skip 1
line and the control word .I15 to indent some text. After the indented
line, we skipped another line with .L1 and we used .IO to reset our
regular left-hand margin to its former column position.

If this were all we wanted to write today, we would then store it on
diskette. Since we're using the ATARI Program-Text Editor, we'll use
the command EXIT to store our sample file on diskette.

We're now ready to print a formatted copy of the file. We turn on our

printer and interface module. Because we have the diskette version of FORMS, we load it into RAM by typing RUN "D:FORMS" and pressing the RETURN key. FORMS first prompts us for the name of our text file:

                    TEXT FILE NAME?

We respond by entering the name, SAMPLE in this case. Next, FORMS asks us on what printed page number we want to begin printing:

              WHAT PAGE SHALL I START PRINTING
              WITH (HIT RETURN TO PRINT ENTIRE
                          DOCUMENT)?

Obviously, our sample will fill only part of the first page, so we can press the RETURN key to cause FORMS to print the entire file. FORMS then formats and prints our input file. You'll see the input file scroll on your TV screen as FORMS reads through your file.

At the end of the video display, FORMS lists the number of SOURCE ERRORS encountered in the file. These are lines that began with a period, alerting FORMS to a control word, but that FORMS couldn't understand or carry out. In addition, if our text contains text formatting errors, in each instance FORMS prints (and also displays on the video screen) the last control word it read and then prints the SOURCE ERROR message. For example, if you type .IO (the letter "O") instead of .IO (the number zero) to reset your left-hand margin, then FORMS displays the message:

            *** SOURCE ERROR, LAST COMMAND: ***
                        *** .IO ***

Those are the steps for using FORMS with a full-screen text editor. Using a line-oriented editor involves the same steps, except your text lines begin with line numbers. For more information about these two types of text editors, see the section titled "USING LINE-ORIENTED AND FULL-SCREEN TEXT EDITORS" later in this manual.

Summary of steps--Text editing

USING THE ATARI ASSEMBLER EDITOR CARTRIDGE

These are the steps you normally follow to create or revise a
text file with the text editor on the ATARI Assembler Editor
Computing Language Cartridge (CXL4003). If you're using another
text editor, then skip this section.

1 LOAD YOUR TEXT EDITOR INTO RAM

a. If you're planning to store your text file on diskette, turn on
your disk drive and insert the diskette.

b. Insert the Assembler Editor cartridge in the Cartridge slot of
your computer.

c. Turn on your computer and turn on your television. You'll be in
EDIT mode--ready to create a text file or load one in from
diskette or cassette.

d. See the <u>Assembler Editor User's Manual</u> (Part No. C014189-03
REV. 1), 1981, Chapter 3, "Using the Editor", pp. 15 - 23, for
more information about using this editor.

2 LOAD YOUR TEXT FILE INTO RAM (to work on an existing file)

Type   ENTER#D:filename   to load a diskette file (replacing
"filename" with the name of your text file in upper case) or
ENTER#C: to load a cassette file (making sure you have the tape
rewound to the beginning).

3 CREATE/REVISE YOUR TEXT FILE

a. Consult the user manual for for the editing functions available
to create and revise your text file.

4 STORE YOUR TEXT FILE

Use the command LIST#D:filename to store your text file on
diskette, or use the command LIST#C: to store your text file on
cassette (be sure you rewind the tape to the beginning).

Using the ATARI Program-Text Editor

These are the steps you normally follow to create or revise a text file with the ATARI Program-Text Editor. If you're using another text editor, then skip this section.

1 LOAD YOUR TEXT EDITOR INTO RAM

a. Turn on your disk drive and insert the ATARI Program-Text Editor diskette.

b. Turn on your computer and your television.

c. Type DOS and use menu selection (Binary Load) to load the text editor into RAM.

d. Type MEDIT in response to the prompt LOAD FROM WHAT FILE?

2 LOAD YOUR TEXT FILE INTO RAM (to work on an existing file)

Enter the name of your text file on diskette in response to the prompt

FILENAME?

(e.g. SAMPLE). If you're using more than one disk drive, include the device initial (D) and the number of the drive containing your text file, in the format, e.g., D2:SAMPLE .

3 CREATE/REVISE YOUR TEXT FILE

Consult the user manual for the editing functions available to create and revise your text file.

4 STORE YOUR TEXT FILE

The EXIT command automatically ca uses the editor to store your text file on diskette under the name you specified when you entered the editor.

Using another text editor

These are the steps you normally follow to create or revise a text file with a text editor other than the editor on the ATARI Assembler Editor Computing Language Cartridge or the ATARI Program-Text Editor. If you're using one of these latter text editors, then skip this section.

1 LOAD YOUR TEXT EDITOR INTO RAM

For loading instructions, consult the user manual for your text editor.

2 LOAD YOUR TEXT FILE INTO RAM (to work on an existing file)

For text file loading instructions, consult the user manual for your text editor.

3 CREATE/REVISE YOUR TEXT FILE

a. Consult the user manual for your text editor for the editing functions available to create and revise your text file.

4 STORE YOUR TEXT FILE

For instructions on how to store text files, consult the user manual for your text editor.

Summary of steps-using FORMS

Diskette files

These are the steps that you normally follow to print a formatted version of your text file when FORMS and your input files are on diskette. If you're using cassettes, then skip this section.

5. LOAD THE TEXT FORMATTER (FORMS) INTO RAM

a. Insert the ATARI BASIC Language CArtridge in the (Left Cartridge) slot of your computer.

b. Turn on your printer. If you're using an ATARI 825 Printer, then also turn on your ATARI 850 Interface Module.

c. Turn on your disk drive and insert the FORMS diskette.

d. Power up your computer and turn on your video screen (if these aren't already on).

e. When the READY prompt displays, type RUN "D:FORMS" and press the RETURN key. If you're using more than one disk drive, remember to follow the device initial (D) with the number of the drive containing FORMS (e.g., RUN "D2:FORMS" for disk drive two). FORMS will load into RAM and start.

6. PREPARE YOUR TEXT FILE FOR AUTOMATIC LOADING BY FORMS

a. If you're using only one disk drive, remove the FORMS diskette after it has loaded and insert your text file diskette. Otherwise, insert your text file in another disk drive.

7. ANSWER THE FORMS PROMPTS FOR FILENAME AND STARTING PAGE

a. When you start the FORMS program, you'll see the prompt TEXT FILE NAME?. Enter the file name (e.g., SAMPLE). If your diskette is not on disk drive one, include the device initial (D) and the number of the disk drive containing your file (e.g.,

14

D2:SAMPLE for disk drive two).

b. The second prompt asks you on what printed page number you want FORMS to begin printing. The prompt is WHAT PAGE SHALL I START PRINTING WITH (HIT RETURN TO PRINT ENTIRE DOCUMENT)?. To print the entire file, simply press the RETURN key. To stop printing after a particular page, enter the number of the last page you want printed and press the RETURN key.

these are the steps you normally follow to print a formatted version of yout text file when FORMS and your input file are on cassette. IF you're using diskettes, then skip this section.

5. LOAD THE TEXT FORMATTER (FORMS) INTO RAM

    a. Turn off your computer.

    b. Insert the ATARI BASIC Language Cartridge in the cartridge slot of your computer.

    c. Slide the FORMS cassette into the program recorder'S cassette holder and press REWIND on the recorder until the tape rewinds completely. Then press PLAY.

    d. Type CLOAD on your computer and then press the RETURN key two times. The tape will load into computer memory.

    e. After the tape finishes loading, the word READY will display on your TV screen. Type RUN and press the RETURN key. The program's first display screen will appear on your TV screen.

6. PREPARE YOUR TEXT FILE FOR AUTOMATIC LOADING BY FORMS

    a. Remove the FORMS cassette, insert the text file cassette, press REWIND, and then press PLAY.

ANSWER THE FORMS PROMPT FOR FILENAME AND STARTING PAGE

    a. When you start the FORMS program, you'll see the prompt TEXT FILE NAME?. Type C: in response to the prompt and press the RETURN key twice.

    b. The second prompt asks you on what printed page number you want FORMS to begin printing. The prompt is WHAT PAGE SHALL I START PRINTING WITH (HIT RETURN TO PRINT ENTIRE DOCUMENT)?. To print the entire file, simply press the RETURN key. To begin printing on another page, enter the page number and press the RETURN key (e.g. 4<CR>). Answer these prompts

quickly, as the tape is rolling.

If you specify a number, FORMS will also ask you the output page number after which it is to stop printing. THe prompt is WHAT IS THE LAST PAGE YOU WANT TO PRINT?. To print to the end of the file, simply press the RETURN key. To stop printing after a particular page, enter the number of the last page you want printed and press the RETURN key.

Line-oriented and full-screen text editors

Most text editors are either line-oriented or full-screen. By line-oriented, we mean all the lines of your text file begin with numbers and you sometimes use these numbers with editing commands to revise your text. By full-screen, we mean your lines of text contain no inital line numbers, and generally you use directional arrow keys to move around the screen to add and revise your text.

HOW YOUR TEXT EDITOR INFLUENCES FORMS

FORMS assumes you're using a line-oriented text editor. In this mode, FORMS reads the number beginning each line until it reaches a space or a character other than a digit. It then skips over the line number and one space, if present, and interprets the rest of each line for control words and text. If more than one space follows a line number, FORMS preserves these additional spaces. If your text immediately follows the line number (eith no intervening space), FORMS retains the first text character.

If FORMS doesn't encounter a number at the beginning of the first input line, it assumes your text editor is full-screen and it uses everything on the line.

RESETTING THE TEXT EDITOR FLAG

FORMS sets a flag when it determines the mode of your text editor. The flag is preset to line mode. However, the first time it encounters a line without a beginning number, the flag flips over permanently to full screen mode and FORMS thereafter uses everything on each line. In the same manner, if your first line doesn't begin with a number, then FORMS assumes you're using a full-screen editor and it permanently flips over the flag to full-screen mode at the start of your input file.

STARTING YOUR INPUT FILE WITH A NUMBER WHEN USING A FULL-SCREEN TEXT EDITOR

Suppose you're using a full-scren editor, but you want to begin your text with a number (a date, for example). You don't want FORMS to interpret this number as a line number, and therefore ignore it. To signal FORMS to print this number, imbed the command .L as the first input line (this command tells FORMS to start a new line) and enter your number as the second input line. For example, to begin your text with the date 5/01/81, enter it this way

```
.L
5/01/81
```

General notes on using FORMS

ENTERING FORMS CONTROL WORDS

All FORMS control words begin with a period in column one, followed by one letter, which can be upper case or lower case. For example, .S is the control word to tell FORMS to begin a new page. You can alsoenter this as .s. Many control words also contain a number. For example, .I5 tells FORMS to indent the text on subsequent lines five spaces from the left-hand margin. The control word descriptions indicate which control words use numbers.

You enter these control words right along with your text, at whatever point you want to change the layout. You place some control words on the same line as the affected text. For example, to center a line of text (the control word is .C), you enter the control word and the text to be centered as one line:

        .CCENTER THIS LINE

In other cases, you place a control word on a line separate from the text it controls. For example, to tell FORMS to move column 20 of the current line and print text, you use .M20 and you place on the next line the text to print starting in column 20:

        .M20
        TITLES/CATEGORY

The format of each control word in the descriptions indicates whether the control word belongs by itself or with an accomanying text.

Enter one control word per line. Thus, if you want to skip a line with the .L1 control word and indent the text five space with the .I5 control word, you enter each control word on a separate line:

        .L1
        .I5

LINE FEEDS, LINE FILL, AND BREAKS

FORMS fills up a line to the default or user-set line length by adding successive words from the input file until one more word would cause FORMS to exceed the right-hand margin. However, some control words cause an automatic break in filling up lines, such that FORMS starts a new line with the text following these control words regardless of the space remaining in the current line. For example, the control word to start a new line, .L, forces FORMS to end the current line and begin printing subsequent text on a new line. The individual descriptions indicate when a control word causes a break.

TELLING FORMS TO START A NEW LINE

Sometimes you'll want to start a new line at a specific point in your text, even though room remains on the current line. To tell FORMS to break and begin a new output line, use the control word .L and thn continue your text on the next line. For example, to end the line containing the text "looks like the following:" and tell FORMS to put the next two input lines (for example, (1)ENTER TEXT and (2)WHEN READY) on two separate output lines, you would enter your text as follows:

```
look like the following
.L
ENTER TEXT
.L
WHEN READY
```

Your output text will be

```
looks like the following
ENTER TEXT
WHEN READY
```

Alternatively, you can begin each line with a comma that you want to print on a new line. With this method, the same input text would look like this:

looks like the following
,ENTER TEXT
,WHEN READY

UNDERLINING

A nice feature of ATARI 825 printers is their ability to handle
underlining. FORMS doesn't control underlining, but we mention
the method here because underlining enters into many aspects of
text formatting.

To underline and block of text, use the CTRL-O(the letter "O")
code at the beginning of the block and the CTRL-N code at the
end of the block. Sometimes you'll want to underline indented
text that takes up more than one input line. To prevent the
printer from extending the underline from the left-hand margin
of these subsequent lines, break your text into blocks comprising
one line each and place the CTRL-O and CTRL-N codes around
each block. (Usually you'll need to print at least one draft to
determine these blocks and then modify these lines for the next
printing.)

Control word descriptions

CENTER TEXT IN BOLDFACE

Format: .B<text>

Example: .BDESCRIPTIONS

Use this control word to center the text immediately following it, using an elongated character set, which resembles boldface. This control word is usable only on the ATARI 825 Printer, which supports several character sets. The text will center between the current indent value (.I) and the current maximum line length (.W). This control word causes a break.

Remember that you may use only half as many characters per line with an elongated character set as you're using in your normal character set. For more information about elongated character sets, see the <u>ATARI 825 80-Column Printer Operator's Manual</u>, 1980.

The example would print as:

DESCRIPTIONS

CENTER TEXT

Format: .C<text>

Example: .CTable of Contents

Use this control word to center text within the current indent value (.I) and maximum line length value (.W). The text following .C may be no longer than the number of spaces between these two values. For example, if your current indent value is 10 and your line length is 80, then the line of text can't exceed 70 characters. This control word causes a break.

In the example, the text Table of Contents would appear as

follows:

TURN OFF LINE FILL MODE

Format: .D

Use this control word to turn off line fill temporarily so that the
end of each output line corresponds exactly to the end of each
input line. The default mode is to fill lines (.DO). This control
word affects only line filling. FORMS still uses any indent value
and centering control words you enter. This control word causes
a break.

Because creating tables with multiple columns is difficult in
FORMS, you might want instead to use this control word to turn
off line filling and enter your columns as you want them to
appear on output. To turn the line fill function back on, use .DO ,
described below.

Note. Beginning users tend to use .D instead of using other
control words that would save time and keystrokes. This control
word is seldom necessary.

TURN ON LINE FILL MODE

Format: .DO

Use this control word to turn line fill mode back on again after
having turned it off with the .D control word. (Note. The
character following the .D is a zero, not the letter "O".) Line
fill is the default mode. This control word causes a break.

ESCAPE SEQUENCE FOR PRINTER CONTROL CODE

Format: .E#

Examples: .E14

Use this control word to send a control code to your printer. The
control word consists of an escape character followed by the
ATASCII character represented by the decimal number, #. These
codes access special features like character sets and line feeds.
Table 2 (Printer Control Codes) of the <u>ATARI 825 80-Column
Printer Operator's Manual</u> lists the codes for the ATARI 825
printer. For other printers, refer to the user manual to determine
whether you can use this control word. Some of the most useful
codes for the ATARI 825 printer are:

    .E14   Start elongated print (twice normal
width)
    .E15   Stop elongated print
    .E17   Selected proportional character set
    .E19   Select standard character set
    .E20   Select condensed character set
    .E28   Advance half line (for subscripts,
etc.)
    .E30   Reverse   half   line   (for
superscripts, etc.)

Most of these codes remain in effect until you enter another
control code of the same type (i.e., one character set control code
to replace another one). In addition, these codes remain in effect
as long as the printer is turned on. FORMS doesn't reset the
printer each time you run the program.

LINE FEEDS BETWEEN PAGES

Format: .F#

Example: .F3

Use this control word to alter the default setting of 6 line feeds
between pages. This number of lines, when combined with the
default page height (.H) setting of 59 lines per page, comprises
the number of lines available per 11-inch sheet: 65 lines. (FORMS
uses the remaining line to print the page number.) Change the
line feed setting to accommodate different paper lengths. This
control word has no upper limit. Remember to adjust your page
height value so that the two values total to the number of lines

per page. For example, if you want to print 62 lines (.H62), then adjust line feed to three lines (.F3).

The control word .F0 issues a form-feed between pages instead of just blank lines, for printers with a form-feed capability.

RESUME READING FROM INPUT FILE

Format: .G

Use this control word at your computer keyboard for either of two
occasions. At the time FORMS prompts you for the name of your file, it also displays this message at the bottom of the screen:

        (FOLLOW NAME WITH * FOR MANUAL MODE)

If you enter your file name and append an asterisk, FORMS enters manual mode. See the manual mode control word (.K) for more information. You also have the option of entering manual mode at any point(s) during which FORMS is reading your file by entering the .K control word in your input file.

When you complete your manual mode activities, use control word .G to tell FORMS to resume reading your input file. The prompt MANUAL INPUT MODE (INPUT '.G' WHEN DONE) displays on your video screen when you enter manual mode to remind you of the control word to use to resume input file mode.

SET PAGE HEIGHT

Format: .H#

Example: .H57

Use this control word to change the default page height of 59 lines. You may use any value over 9. Lines are added or removed from the bottom of the page. This value, together with the line feed value (.F) comprises the number of lines available on 11-inch paper. Change this value if you want more or fewer lines

per page. Remember to adjust your line feed value so that the two values add up to the number of lines per page. For example, if you want to change your line feed to 8 lines per 11-inch page (.F8), then adjust your page height setting to 57 lines (.H57).

INDENT TEXT

Format: .I#

Example: .I4

Use this control word to end the current output line and start a new line, with the left margin moved to the column position indicated by the number following .I . This value can be from 0 to the maximum line width (specified by .W#), minus 1. For example, .I4 indents subsequent lines of text four columns from the left margin. The control word .I0 cancels the previous .I# control word and positions subsequent lines of text at the left margin. The default value is .I1 . (Note. .I0 and .I1 are equivalent; they both refer to the left-hand margin.) This control word has no effect on the right margin.) To indent the right margin, use the maximum line length control word, .W#). This control word causes a break.

JUMP TO NEXT PAGE

Format: .J#

Example: .J8

Use this control word to start a new page if the number of output lines following .J can't fit on the current page. This control word is useful for assuring that a block of text remains together on a page and for leaving room for tables, figures, or illustrations. For example, to avoid breaking up a figure occupying 8 output lines, enter the control word .J8 prior to this block of text. If at least 8 lines remain on the current output page, FORMS will print the figure on that page; otherwise, FORMS leaves the remainder of the current page blank and prints the figure beginning at the top of the next page.

Format: .K

Use this control word whenever you want FORMS to stop reading
your input file temporarily and instead read control words and
text you type at your keyboard at the time of printing. This
control word causes a line break. Use the same procedures for
entering control words and text in manual mode as you do in input
file mode.

You can accomplish the same thing when FORMS starts to print
your file by answering the TEXT FILE NAME? prompt with the
name of your input file followed by an asterisk (e.g., SAMPLE*).
FORMS will immediately go into manual mode and wait for your
keyboard input. Use the .G control word to tell FORMS to
resume reading your input file.

Manual mode is useful when you want to try a variety of
formatting techniques fairly quickly. You can bypass having to
load your text editor and source file, revise your file, save it,
and then load FORMS. Instead enter a .K in your input file
wherever you want to experiment, load the FORMS program, and
enter control words and/or text from the keyboard. After seeing
the results, simply reload FORMS and enter other control words
and/or to try out other approaches. This mode is also useful if
you want to change the layout of a block of text, depending on
the purpose of the printing. For example, you might want to use
one character set and indent and line length values for one
purpose and another character set and indent and line length
values for another purpose. This set of control words (.K and
.G) let you specify such values at the point of printing.

NEW LINE

Format: .L

Use this control word to tell FORMS to end the current output
line and start a new one with the text following .L . You can
also cause a break at any time by placing a comma in column one
of the text starting the new line. Thus, the following input lines
both cause a line break:

1).L
    this text starts a new line

2) ,this text starts a new line

SKIP LINES

Format: .L#

Example: .L4

Use this control word to insert as many blank output lines as you indicate in the number following .L . The value can be 1 or greater. This control word causes a break. For example, .L4 tells FORMS to insert four blank output lines before printing the next line of text.

MOVE TO SPECIFIED COLUMN

Format: .M#

Example: .M20

Use this control word to tell FORMS to move to a particular column in the current output line and resume printing from there. If the current output line has printed beyond that value, then FORMS prints the text on the next line, starting in that column. For example, .M20 tells FORMS to stop printing, move to column 20 of the current output line and resume printing the next text (or to move to column 20 of the next output line if FORMS has already passed column 20 of the current output line). This control word does not cause a break and it applies only to the current line. (See .I for a control word that does cause a break and continues to print starting in a specified column in every line until turned off.)

Use this control word to create columns of data, tables, and other tabular text. Note. When you use a proportional character set available on the ATARI 825 printer, columns will not align with this command. Either align them manually, or use a monospaced character set for your tabular data.

Format: .N#

Example: .N5

Use this control word to change the current output page number
to the value you specify. For example, entering .N5 changes the
current output page number to 5. This number prints at the
bottom of each page in the center, in the format:

-5-

To turn off page numbering, set this value to zero (.N0). You can
enter these control words anywhere on the page on which you
want them to take effect. The default is not to print the page
number on the first output page, but to number all other pages.
To cause the number to print on the first page, use .N1 .

This control word is useful for turning off page numbering, which
is always in arabic form, on introductory pages like the preface,
table of contents, and the verso of the title page. For these
pages, enter .N0 until you want to start numbering. Then use
.N1 (or whatever value you want to assign the first page) to tell
FORMS to print page numbers for the body of your text.

Important Note.
FORMS prompts you at the time of printing for the page number
at which you want FORMS to begin printing. FORMS uses the
printed page number as its guide. Therefore, to use this feature,
don't suppress page numbering.

NEW PARAGRAPH

Format: .P

Use this control word to start a new paragraph. It tells FORMS
to end the current output line (i.e., to break), skip one line, and
indent the beginning of the next line five spaces (or the number
of spaces you set with the .P# command, described below).

USER-DEFINED NEW PARAGRAPH

Format: .P#

Example: .P3

Use this control word to start a new paragraph for which you specify the number of spaces to indent. As with .P , FORMS will end the current output line, skip one line, and resume printing on the next line. For example, to indent your paragraphs three spaces, enter .P3 once. Thereafter, FORMS indents all your paragraphs three spaces whenever you use .P , until you change the value again. If you've indented your left-hand margin, FORMS will indent your paragraphs starting from this value rather than from the left-hand margin. You may use any value between 2 and the maximum line lenth (.W), minus 1. Thus, if your line length is 85 characters, you may indent the first line of each paragraph as far as 84 characters! The default is .P5 . (Note. The values .P0 and .P1 both default to the left-hand margin.)

PAUSE AT END OF EACH PAGE

Format: .Q

Use this control word to tell FORMS to pause at the end of each page so that you can change paper in your printer. When you have the paper positioned, press the RETURN key to resume printing. Use .Q0 to turn off this option. The default is .Q0 .

PRINT CONTINUOUSLY

Format: .Q0

Use this control word to turn off the paper pause control word (.Q) you entered earlier in your input file. FORMS will then resume printing continuously to the end of your input file or to

the page you specified in response to the WHAT IS THE LAST PAGE YOU WANT? prompt at the time of printing. PRINT CONTINUOUSLY is the default and you needn't enter .Q0 unless you've used .Q elsewhere.

REMARK

Format: .R<text>

Example: .RThis file name is FORMS.APX

Use this control word to enter comments in your input file that you don't want printed in your formatted output. Precede each continuation line of a comment with this control word.

START NEW PAGE

Format: .S

Use this control word to tell FORMS to stop printing on the current page and print the text following this control word beginning at the
top of the next page. This control word causes a break, and FORMS leaves the rest of the current page blank.

TOP TITLE

Format: .T<text>

Example: .TFORMS User Instructions

Use this control word to tell FORMS to print the string following .T centered in the top margin area of each page. See the top of this page for an example. This string can be as long as 80 characters. The top title uses current indent value (.I) and line length (.W) to center its title.

(Note.
If you use any of the proportional character sets, the top title

will often be off-center. In addition, the top title prints in whatever character set it is currently using via the .E control word at the time it line feeds to a new page.)

To turn off this string, enter .T somewhere on the page preceding the page on which you don't want the string to print. To change the string, enter another string in the same manner. For example, to change the top title from FORMS User Instructions to Summary of FORMS Control Words, enter .TSummary of FORMS Control Words. The default is .T (no top title).

LINE SPACING

Format: .V#

Example: .V1

Use this command to tell FORMS how many lines to skip between output lines of text. You can change this number anywhere in your input file. The default is .V0 , which is single spacing. To double space your text, use .V1 ; to triple space, use .V2 . This control word causes a break.

RIGHT-HAND MARGIN SETTING

Format: .W#

Example: .W100

Use this control word to set the right-hand margin. You can use it anywhere in your input file to change the margin as desired. This control word causes a break. FORMS will print as many words and other concatenated strings on a line as it can fit within this range. The default value is 78, which suits the default 10 cpi, monospaced character set on the ATARI 825 printer. This value can range from 1 to 200, but it must be at least one greater than your current indent (.I) setting. For example, if you set an indent value of 20 (.I20), then .W must be at least 21 (.W21). In this case, your text would print one character per line!

<u>Note.</u>
When you change character sets, you'll need to adjust this value.
For example, a value between .W90 and .W100 is about right for
a full width line using the proportional character set (via the
.E17 control word). Be advised that FORMS doesn't handle
proportional spacing well. Some lines containing many capital
letters will be very long, whereas other lines will be quite short.
The effect is quite ragged.

SOURCE ERRORS

When FORMS sends a SOURCE ERROR message, it includes the last FORMS control word it read. Some common errors are immediately identifiable in this way. For example, sometimes users unintentionally begin a line with a period that is part of their text rather than the beginning of a control word. But FORMS automatically interprets the next character(s) as a control word. Thus, if FORMS doesn't recognize the characters as valid control words, it prints a SOURCE ERROR message. Another mistake easily identified is using an uppercase O rather than a zero as the numeric value part of a control word.

However, you can't always count on the control word accompanying the SOURCE ERROR message as being the source of the problem. For example, suppose you set your right-hand margin to 60 (.W60) and later set an indent value of 65 (.I65). FORMS will send a SOURCE ERROR message when it tries to reset the indent value to 65 and discovers the value exceeds the right-hand margin. In this case, it would display the indent control word as part of the SOURCE ERROR message, but the real problem is the incompatibility of the two values. The solution is to reset either the right-hand margin or the indent value. Thus, some kinds of errors will take some analysis when the control word accompayning the SOURCE ERROR message is valid.

CENTERING

Keep in mind that FORMS uses any current indent value and the right-hand margin to center text via the .C control word. In some cases, you might want to reset the indent value to .I0 temporarily so as to center a string correctly across the whole line length.

In addition, when you imbed control codes (e.g., CTRL-0 and CTRL-n to underline) in string of text you want centered (using .C for text or .T for the centered top title), FORMS counts each code as a character in the string to be centered and therfore changes the true length of the string to be longer than it really is. To compensate for the offset, add extra space(s) between the .C control word and the text to be centered. You'll need to experiment to determine the correct number of spaces to add, since this number depends on whether the number of characters in your string is even or odd and on the nature of the control codes you're imbedding.

PROPORTIONAL SPACING

Remember that when you use a proportional character set, the right-hand marging is quite ragged. This is especially apparent in a line containing many uppercase letters, which often extends far beyond other lines. You can control the appearance of such lines by forcing FORMS to break after a specific word (see control word .L).

Advanced hints

POSITIONING PAPER IN THE PRINTER

If you're using an ATARI 825 printer, postion the paper so that the top is even with the top of the printhead. For other printers, you might have to experimant to determine the correct initial position.

After FORMS finishes printing a file, it advances the paper a few additional lines for ease in tearing off perforated paper. Remember to reposition the top of the paper to line up with the top of the printhead before using FORMS again.

EXPERIMENTING WITH FORMS WITHOUT LOADING A TEXT FILE

You might want to do some quick experimentation with control words and text before imbedding control words in your text file. You can do some fast testing without loading a text file into RAM by running FORMS as usual, but answering the TEXT FILE NAME? prompt with E: instead of with the name of a text file. Respond to the prompt asking for the starting page by pressing the RETURN key. The E: command turns control over to the keyboard. You can then key in control words and text. FORMS reads these lines as it would if you had used the control word .K to go into the manual mode. FORMS echoes the lines on your video screen.

Sometimes nothing happens immediately after you enter a control word or text and press the RETURN key. The reason can be either that the line buffer FORMS fills before printing the output line in not yet full, or that the control word is such that it doesn't affect the immediate output line. Examples of the latter case are changing the page number (.N#) or the top title (.T<text>) midway on an output page. The change will show up in the next occurence of that action.

Use CTRL-3 to simulate an END OF FILE command to cause FORMS to print the SOURCE ERROR summary and to form-feed the paper. You can then also return to the READY prompt in BASIC.
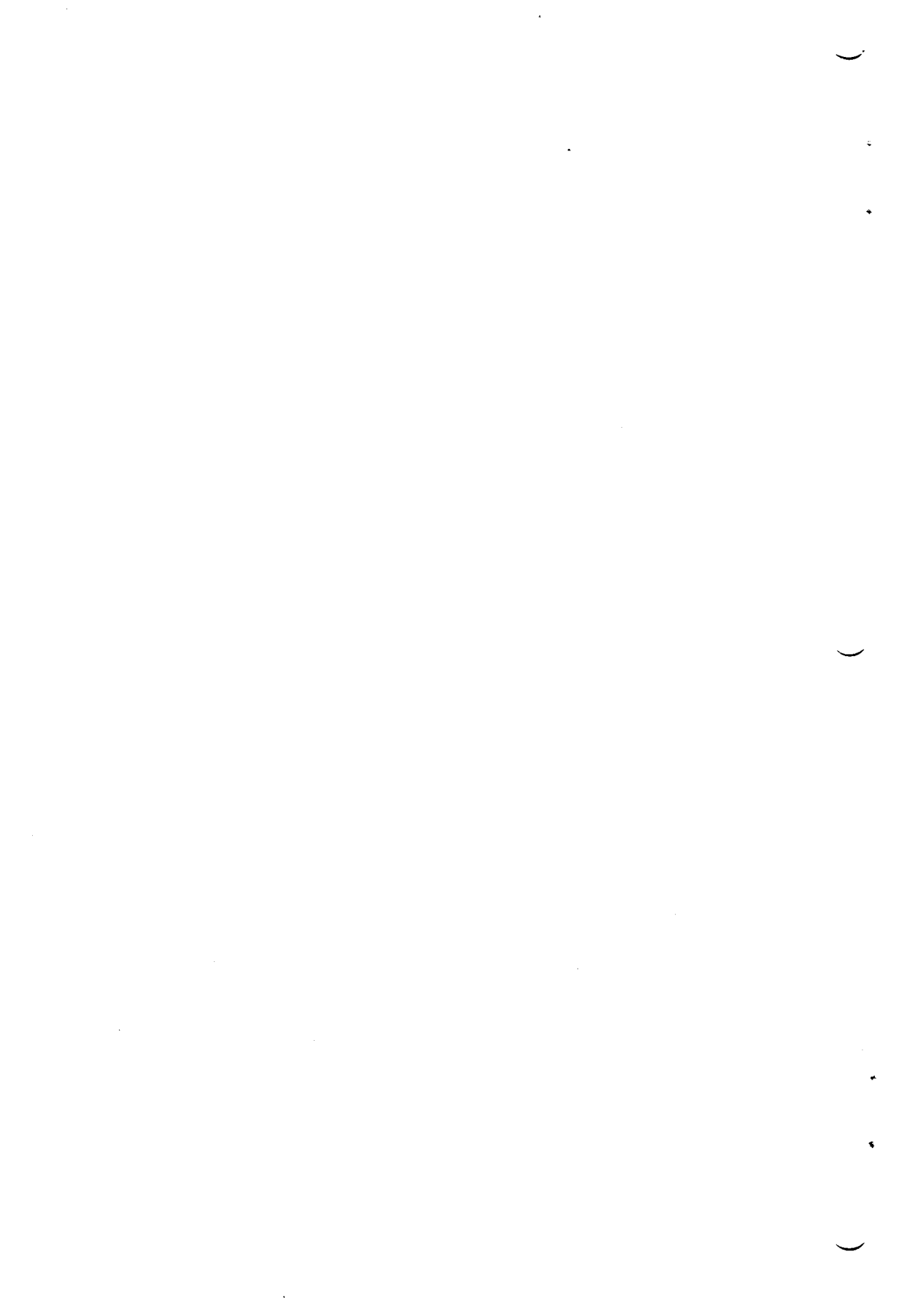
Review Form

We're interested in your experiences with APX programs and documentation, both favorable and unfavorable. Many of our authors are eager to improve their programs if they know what you want. And, of course, we want to know about any bugs that slipped by us, so that the author can fix them. We also want to know whether our instructions are meeting your needs. You are our best source for suggesting improvements! Please help us by taking a moment to fill in this review sheet. Fold the sheet in thirds and seal it so that the address on the bottom of the back becomes the envelope front. Thank you for helping us!

1. Name and APX number of program.

_____

_____

2. If you have problems using the program, please describe them here.

_____

_____

_____

3. What do you especially like about this program?

_____

_____

_____

4. What do you think the program's weaknesses are?

_____

_____

_____

5. How can the catalog description be more accurate or comprehensive?

_____

_____

6. On a scale of 1 to 10, 1 being "poor" and 10 being "excellent", please rate the following aspects of this program:

_____ Easy to use
_____ User-oriented (e.g., menus, prompts, clear language)
_____ Enjoyable
_____ Self-instructive
_____ Use (non-game programs)
_____ Imaginative graphics and sound

7. Describe any technical errors you found in the user instructions (please give page numbers).

_____

_____

_____

8. What did you especially like about the user instructions?

_____

_____

_____

9. What revisions or additions would improve these instructions?

_____

_____

_____

10. On a scale of 1 to 10, 1 representing "poor" and 10 representing "excellent", how would you rate the user instructions and why?

_____

_____

11. Other comments about the program or user instructions:

_____

_____

_____

From

_____

_____

_____

STAMP

APX ATARI Program Exchange
P.O. Box 3705
Santa Clara, CA 95055

[seal here]