BOOKLET–SCREEN

Laser Printer Utility

version 2.3

Users Guide
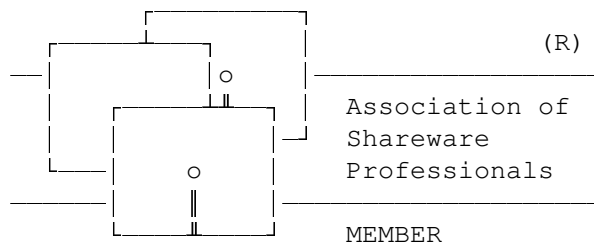
(R)

Association of
Shareware
Professionals

MEMBER

Table of Contents

The Shareware Concept

    Shareware distribution gives users a chance to try software before
buying it. If you try a Shareware program and continue using it, you are
expected to register. Individual programs differ on details -- some
request registration while others require it, some specify a maximum
trial period. With registration, you get anything from the simple right
to continue using the software to an updated program with printed manual.

    Copyright laws apply to both Shareware and commercial software, and
the copyright holder retains all rights, with a few specific exceptions
as stated below. Shareware authors are accomplished programmers, just
like commercial authors, and the programs are of comparable quality. (In
both cases, there are good programs and bad ones!) The main difference is
in the method of distribution. The author specifically grants the right
to copy and distribute the software, either to all and sundry or to a
specific group. For example, some authors require written permission
before a commercial disk vendor may copy their Shareware.

    Shareware is a distribution method, not a type of software. You
should find software that suits your needs and pocketbook, whether it's
commercial or Shareware. The Shareware system makes fitting your needs
easier, because you can try before you buy. And because the overhead is
low, prices are low also. Shareware has the ultimate money-back
guarantee -- if you don't use the product, you don't pay for it.

Disclaimer

    The fact that BOOKLETS will print on both sides of the paper does
not imply that this is accepted practice for your particular printer.
Sympathetic Software is not responsible for damage resulting from
ignoring manufacturers recommendations. That said, we have yet to hear
of any difficulties worse than paper jams when using this utility. Also,
one printer manufacturer who warns against printing on the reverse side
of the paper provides for a "cleaning paper" to be used on cartridge
changes. The recommended procedure is, in fact, printing on the reverse
side of this sheet.

    Users of BOOKLETS must accept this disclaimer of warranty: BOOKLETS
is supplied as is. The author disclaims all warranties, expressed or
implied, including, without limitation, the warranties of merchantability
and of fitness for any purpose. The author assumes no liability for
damages, direct or consequential, which may result from the use of
BOOKLETS.

    BOOKLETS is a "shareware program" and is provided at no charge to
the user for evaluation. Feel free to share it with your friends, but
please do not give it away altered or as part of another system. The
essence of "user-supported" software is to provide personal computer
users with quality software without high prices, and yet to provide
incentive for programmers to continue to develop new products. If you
find this program useful and find that you are using BOOKLETS and
continue to use BOOKLETS after a reasonable trial period, you must make a

registration payment of $20 to SYMPATHETIC SOFTWARE. The $20
registration fee will license one copy for use on any one computer at any
one time. You must treat this software just like a book. An example is
that this software may be used by any number of people and may be freely
moved from one computer location to another, so long as there is no
possibility of it being used at one location while it's being used at
another. Just as a book cannot be read by two different persons at the
same time.

        Commercial users of BOOKLETS must register and pay for their copies
of BOOKLETS within 30 days of first use or their license is withdrawn.
Site-License arrangements may be made by contacting SYMPATHETIC SOFTWARE.

        Anyone distributing BOOKLETS for any kind of remuneration must first
contact SYMPATHETIC SOFTWARE. This authorization will be automatically
granted to distributors recognized by the Association of Shareware
Professionals (ASP) as adhering to its guidelines for shareware
distributors, and such distributors may begin offering BOOKLETS
immediately (However SYMPATHETIC SOFTWARE must still be advised so that
the distributor can be kept up-to-date with the latest version of
BOOKLETS.).

        You are encouraged to pass a copy of BOOKLETS along to your friends
for evaluation. Please encourage them to register their copy if they
find that they can use it. All registered users will receive a copy of
the latest version of the BOOKLETS system. To register your copy of
BOOKLETS, send in a completed copy of the enclosed order form.

Support

        The current version of BOOKLET is available from the IBMHW forum on
CompuServ. Problem reports may be made to Sympathetic Software or sent
by CompuServ E-Mail to:

            Stephen L Billard: 71046,1476

        This program is produced by a member of the Association of Shareware
Professionals (ASP). ASP wants to make sure that the shareware principle
works for you. If you are unable to resolve a shareware-related problem
with an ASP member by contacting the member directly, ASP may be able to
help. The ASP Ombudsman can help you resolve a dispute or problem with
an ASP member, but does not provide technical support for members'
products. Please write to the ASP Ombudsman at 545 Grover Road,
Muskegon, MI 49442-9427 or send a CompuServ message via CompuServ Mail to
ASP Ombudsman 70007,3536. The Ombudsman may be contacted by FAX by
sending to the ASP FAX number: (616) 788-2765. In communications with
the Ombudsman please include a telephone number and/or FAX if available.

Introduction

        BOOKLETS is designed to create PC Booklet sized documents from full
page text files on Laser Printers which emulate the Hewlett-Packard
LASERS series. Also supported are the DeskJet family by Hewlett-Packard.
It prints four pages of the text file on one sheet of paper. The pages
are printed "half size" on the right and left halves of both sides of a
sheet of paper turned sideways (Landscape orientation.) It supports all
the standard sizes of paper (A4, LETTER, LEGAL, and EXECUTIVE)

        BOOKLETS will perform transformation on basic LASERS formatting
commands. This means that you can use your word processor to print a
formatted document to a file and use BOOKLETS to print that file in
booklet form. (You must get your word processor to create a file with
PCL commands. Generally this is done by a "Print to disk" command.
BOOKLETS cannot print from your word processor's internal data file
format.) For this to be successful, you must have fonts loaded in your
printer for the sizes BOOKLETS will use. These can be from a font
cartridge or may be soft fonts which you have loaded ahead of running
BOOKLETS. BOOKLETS does not create or load any fonts. You will need
fonts which are approximately two thirds the point size of the fonts you
use in your document. If you do not have exactly the right font, the
LASERS will select the closest match from the ones it has. This match
may or may not prove acceptable.

        For plain ASCII text BOOKLETS will select the 16.67 character per
inch landscape lineprinter font. This font does not exist on either the
original LaserJet or the LaserJet+. You will need to use a font
cartridge having this font or to load a soft font equivalent before
running BOOKLETS.

        BOOKLETS transforms only font, line spacing, and cursor positioning
commands. It will discard page control commands such as page size, page
orientation, and margins. If your document contains these, it may not
print correctly.

OPERATION

        BOOKLETS is menu driver and screen oriented. On line context
sensitive help can be selected by pressing the F1 function key. If you
have a mouse installed, BOOKLETS will enable it for use. For keyboard
use, ESC will always cancel out the active window. TAB will move the
cursor from field to field and ENTER will select the selected item. The
up and down arrow keys will move you through the file list or directory
list. Most selections have a highlighted character which allows the
short cut key of ALT-char for quick selection.

        The BOOKLETS dialog windows consist of a combination of push-
buttons, check-boxes and radio-buttons. Push-buttons look like the OK
and Cancel items on the Registration Window. For this document, push
buttons will be brackets surrounding the name of the selection. The
actual appearance will depend of the type of monitor you are using.
Clicking on a button or selecting it with TAB or the short cut key then
pressing ENTER will cause the button's action to happen. When you have

selected the file list or directory list, you can move through its list
with the arrow keys. Pressing ENTER will select the file (or directory).

     Radio-buttons are represented by a pair of parenthesis. Check boxes
are a pair of brackets. Related sets of radio-buttons or check-boxes may
be grouped together with a group name for the group. See the example
below.

          This is a radio-button group   This is a check-box group
            ( ) radio item 1   [ ] check item 1
            ( ) radio item 2   [ ] check item 2

In the above examples, the text above the parenthesis and brackets is the
group name. The text to the right of them is the item name. If there is
a highlighted character in the group name, you can use it to short cut to
the group.

     Radio-button items are mutually exclusive choices. Selecting one
will deselect the others in the group. The selected item is indicated by
a dot within the parenthesis. Check boxes are non exclusive choices.
Any number in a group may be selected. These are indicated by an X in
the box.

     Sometimes the hot key characters in one group are the same as those
of another group. To hot key to one of these, first hot key to the
group, then the item.

BOOKLETS Screens:

Registration Window:

```
    ┌═[▪]═════════Enter Registration═══════════┐
    │                                          │
    │  Your Name                               │
    │                                          │
    │  Registration Key                        │
    │                                          │
    │                                          │
    │        [  OK  ]          [ Cancel ]      │
    │                                          │
    └══════════════════════════════════════════┘
```

     BOOKLETS will start each session with the registration screen active
until you enter your registration information. If you have not yet
registered, you should click on Cancel or press escape to close this
window. Your registration letter from Sympathetic Software will supply
you with the information on filling in this screen.

Main Window:

```
┌═[▪]════════════════BOOKLETS version 2.3════════════════════════╗
│                    Copyright 1990, 1991                        │
│                    Sympathetic Software                        │
│                                                                │
│ File name: *.*                                                 │
│                                                                │
│ Directory: C:\BOOKLETS                                         │
│                                                                │
│ Files               Directories                               │
│  booklets.pcl    ↑   ..\              ↑   [ Print ]  [Options  ] │
│  booklets.exe   ⁞   [A:]            ⁞                          │
│  readme.1st     ⁞   [B:]            ⁞                          │
│  register.frm   ⁞   [D:]            ⁞   [Restart]  [Configure] │
│                 ⁞                   ⁞                          │
│                 ⁞                   ⁞                          │
│                 ⁞                   ⁞   [  Quit ]              │
│                  ↓                   ↓                         │
│                                                                │
╚════════════════════Unregistered evaluation copy═══════════════╝
```

     From the main window you select the file to be printed. You can do
this either by typing the name in the File name selection or by browsing
through the Directories and Files lists. When you have the name of the
file you wish to print showing in the File name selection you can print
it by pushing the Print button. (You push a button by clicking on it
with the mouse or selecting it and pressing ENTER.) You can restart
printing of a file from the Restart button.

     From this window you can also configure your copy of BOOKLETS by
pressing the Configure button. You can set options for printing the
document via the Options button. Finally, pressing Quit will cause
BOOKLET to close the window and return you to DOS.

Configure window:

```
┌─[■]═══════════════Select Configuration═══════════════┐
│                                                      │
│   Paper feed                 Paper size              │
│    (♦) Simplex                ( ) A4                 │
│    ( ) Inverted               (♦) Letter            │
│    ( ) Multi-Purpose Tray     ( ) Legal             │
│    ( ) Duplex                 ( ) Executive         │
│    ( ) DeskJet                                       │
│                                                      │
│   second side Handling       Top margin     2.0     │
│    ( ) None                  Bottom margin   2.0     │
│    (♦) Wait for enter        Left indent     4.0     │
│    ( ) Manual feed first page Right indent   4.0     │
│    [ ] Announce second side                          │
│                              Ring binder margin  5.0 │
│   default Paper source       Gutter              2.0 │
│    ( ) Upper tray                                     │
│    (♦) Lower tray            Left auto skip     3.00 │
│    ( ) MP tray              Top auto skip       0.00 │
│                                                      │
│   [ ] Left handed mouse      Font [10U[(s0p0s0b0t    │
│   [ ] Reverse Landscape                              │
│                                                      │
│        [  OK  ]          [ Save ]          [Cancel]  │
│                                                      │
└══════════════════════════════════════════════════════┘
```

     This Paper feed radio-button group sets the page printing order
appropriate for your printer's paper feed technique.

     SIMPLEX is the default mode. The printed first sides are placed
face down back into the paper feed tray for second side printing.

     INVERTED is used if your printer stacks the output face up instead
of face down. Otherwise, it functions the same as SIMPLEX.

     MP is used for the Hewlett-Packard LaserJet IIP and IIIP printers.
The printed output is placed face up in these printers' Multi-Purpose
Tray for second side printing. (The paper for the first side may be fed
from either the MP tray or the lower cassette.) NOTE: If you have
selected LC ONLY from the IIP front panel MP will not be able to
function. For most applications, selecting LC TRAY will provide the same
paper source as LC ONLY but allows software switching of trays. ALSO
NOTE: if you are using the front output tray in conjunction with the MP
tray, these printers function like the DeskJet series. Select DeskJet.

     DeskJet is used for the Hewlett-Packard DeskJet series printers.
These stack face up, but feed differently so that INVERTED does not
produce a proper output order.

     DUPLEX is used with printers such as the HP LaserJet IID which are
capable of printing on both sides of the page on their own.

Second side handling controls what happens between printing the first side and the second side. Specifying Wait for enter will cause BOOKLETS to wait for the Enter key before printing the second side. Manual feed first page causes BOOKLETS to select manual feed for the first sheet printed on the second side. (This is specially useful if your printer is on a network. The printer stops waiting for a manual feed while you reload the paper for the second side. Just put the top sheet in the manual feed when you are ready. You may have to press continue to get the second sheet to feed on some printers.) If None is selected, the printing of the second side is continuous with the first.

Check the Announce second side check-box and BOOKLETS will sound a tone when it has completed printing the first side of the document. This is useful for printers with a small buffer. When the printer has a large buffer, The tone will come way before the printer is finished.

Default paper source specifies the paper source for BOOKLET. MP is for the LaserJet IIP and IIIP Multi-purpose tray. If you have only one tray, Lower and Upper will be equivalent.

Checking Left handed mouse causes the right mouse button to be the select button and the left mouse button to be the cancel button. With the box unchecked, the left button is the select button and the right button is the cancel button.

If you have a printer which supports Reverse Landscape printing you should check this option. Booklet will then use reverse landscape printing to properly orient the front and back pages when printing in ringbinder mode. The Hewlett Packhard LaserJet III and 4 models support this option as part of the PCL5 printer control language.

Use the Paper size radio-button group to configure the size paper you use in your printer. The sizes are as follows:

```
     A4     = 210 x 297 mm
     LETTER = 8.5 x 11 inch
     LEGAL  = 8.5 x 14 inch
     EXEC   = 7.5 x 10.5 inch
```

You can change the margins of your printed documents by entering new values for Top margin, Bottom margin, Left indent, and Right indent in the fields of those names.

The amount of non printable margin varies with the printer model. The LaserJet IIP is quite happy with a top margin of 1 line. The LaserJet II will lose a line unless the top margin is 2 lines. See below for a further discussion of margins. Your margins must be at least as large as your printer's auto skip regions for proper printing.

The Ring binder margin field allows you to specify a special margin at the top of the logical pages when you have selected Ring binder order for printing. This margin allows for the punched holes a ring binder requires.

The Gutter is the space around the fold. Setting the Gutter adds columns to the right of even pages and to the left of odd pages. The number in this field allows extra space for binding the booklet. See MARGINS below for further detail.

Auto skip is the amount of space that the printer automatically skips over at the top and left edges of the paper. This area is a "forced" margin unique to the printer. LaserJet printers have an auto skip left margin of three characters. They have no top auto skip.

You determine Left auto skip by multiplying the printers left unprintable area in inches (this is on the short edge of the paper since BOOKLETS prints in landscape orientation) by 16.67. (The font BOOKLETS uses is 16.67 characters per inch.)

You will need a Top auto skip if the printer automatically skips lines before it starts printing. The Hewlett-Packard DeskJet printers do this. Compute the top auto skip by multiplying the distance it skips (in inches) by 6.

DeskJet Plus printers have a half inch left margin and a quarter inch top margin. For them you would use a left auto skip of 8.34 and a top auto skip of 1.5.

Note: you must set your margins to be at least as large as the auto skip values.

You can select the default font that Booklet will use in printing your document by editing the Font PCL string. This string is sent to the printer without checking, so you should carefully consult your printer manual when you make changes. The initial default shown selects the Lineprinter font with the PC-8 character set.

If you push the Save button, the configuration you have selected will become the defaults for BOOKLETS. The values for your custom options are kept in a file called BOOKLET.INI which will be found in the same directory as the BOOKLETS program. The command line version, BOOKLET uses this same file, so you the defaults you save will apply to both programs.

Options window:

```
┌═[▪]═══════════════Select Options═══════════════┐
│                                                 │
│    [ ] Header        &U@C&F.D - &FD{MMM D, YYYY} │
│                                                 │
│    [ ] Footer        &O@CPage &P of &#          │
│                                                 │
│   Output LPT1               Sheets per folio 256 │
│                                                 │
│   Marks                     Lines per page   66 │
│    [ ] Staple marks                             │
│    [ ] Cut marks            Pages per side      │
│    [ ] Punch Mark            ( ) 1              │
│    [ ] Midline               (♦) 2             │
│                              [ ] Single sided   │
│    [ ] Ring binder                              │
│                                                 │
│        [  OK  ]         [ Save ]        [Cancel]│
│                                                 │
└═════════════════════════════════════════════════┘
```

        BOOKLETS will print a header at the top of each logical page if
Header is checked. The default header shown to the right will print the
file name and date centered and with a line under them. You can
substitute your own customized header for the default. A full
description appears below on page 12.

        If Footer is checked BOOKLETS will print a footer the bottom of the
document. The default Footer shown will print the page number at the
bottom of each page.

        When Staple marks is checked, staple marks are printed in between
each logical page. These marks can be used for alignment of a stapler.

        When Cut marks is checked, cut marks are printed in between each
logical page. These marks can be used for alignment of a paper cutter.

        When Punch Mark is selected a mark is printed at the center of each
inside margin. This mark can be used for alignment of a hole punch.

        When Midline is selected a line is printed in the center of each
side of the paper. This makes a convenient dividing line between the
left and right pages in two up printing.

        When Ring binder is checked, the pages are printed in sequential
order so that they can be read conveniently if the sheets of paper are
left un folded and placed in a ring binder. When the option is not
checked, the pages are printed in booklet order such that they will be in
sequential order once the sheets of paper are folded in half.

        The Output field allows output to be sent to disk file or to a
specific printer on a port. Enter the name of the file or the designate
for the output device. E.g enter LPT2 to print on the second printer

port. If output is being sent to a disk file and the second side pause
handling is set to Wait for enter, two output files will be created, one
for each side. BOOKLETS will add a "1" or "2" to the suffix of the
filename to indicate side one or two.

        If a booklet contains too many pages, it will be difficult to fold.
The resulting booklet will be too thick. The Sheets per folio field
allows you to set the number of sheets of paper for each folding. Thus,
the booklet could consist of several folios each with up to this number
of sheets of paper. The default is 255 sheets. This is also the maximum
value. Booklets with more sheets will be printed as multiple folios.

        A normal LETTER size document has 66 lines per page. A4 documents
can have up to 70 lines. You should select the number for Lines per page
that is appropriate to the document you are printing.

        BOOKLETS uses this number to compute line spacing. If you set the
number too large, the lines will overprint each other. On A4 paper, 70
lines plus the header and footer works.

        The Pages per side radio-buttons and check box let you control how
the document will be printed. There can be one or two logical pages per
side of paper, and the printing can go on both sides of the sheet or be
single sided (if you check Single side.) One logical page per side gives
you a "full up" page, with headers and footers if you have chosen them.

        If you push the Save button, the options you have selected will
become the defaults for BOOKLETS.

HEADING DESCRIPTIONS

        Headers and Footers (headings) are printed based on the heading
definition associated with each. You can place any text you wish on a
heading. The only constraint is that it must be less than 128 characters
total. In addition to simple text, you may include things like the page
number or file name by using the tokens defined below. The heading can
be highlighted by over bars and under bars and with LaserJet shading and
pattern fills (assuming your printer supports this feature.)

        The text and tokens may be centered or set flush to the right
margin. (By default they are left flush.) A header or footer can be
made up of a combination of left flush, centered and right flush text.
Any text preceded by @C is centered and any text preceded by @R is set
right flush. You may have only one each of the tokens @C and @R in a
heading.

        Enter the header and footer descriptions in the text boxes to the
right of the header and footer picks on the Select Options screen.

The following tokens substitutions are defined for customizing your
heading:

&P   inserts the page number

&#   inserts total number of pages

&F.E   inserts the name of the file being printed

&F   inserts the name of the file without the extension

&FD   inserts the file date

&FT   inserts the file time

&CD   inserts the computer's date

&CT   inserts the computer's time

&U   inserts a line under the header or footer

&O   inserts a line over the header or footer

&Snum   inserts a Shading pattern on top of the header or footer. num
          is a number defining the pattern. Refer to your printer manual
          for Rectangular Area Shading Fill.

&Bnum   inserts a Cross-Hatch pattern on top of the header of footer.
          num is a digit Refer to your printer manual for Rectangular
          Area Cross-hatch Fill.

&&   inserts an ampersand character

&@   inserts an at sign

&{   inserts a brace

   &CT and &FT may optionally be followed by a time format description.
This description is enclosed in braces ("{" and "}"). Use H where you
want hours, MM for minutes and SS for seconds. Use HH for 24 hour
notation. For example, {H:MM:SS} gives the time as 4:45:17 pm. This is
the default format. {HHMM} gives 1645.

   &FD and &CD may also have a format description string following.
Again, these are enclosed in braces. D gives the date, M the month, and
YY the year. DD insures the date is two digits. Likewise MM insures the

month is two digits. MMM will print the name of the month. YYYY will
give a 4 digit year. Examples of date format: {dd-mm-yy} gives
02-10-91. {mmm d, yyyy} gives October 2, 1991.

Sample Headings

     &U@X&F.E - &FD{MMM D, YYYY}   gives a header with the full file name
and date (separated by a hyphen) centered with a line underneath. This
header will look as follows:

                    BOOKLET.PCL - September 26, 1991
_____

     &O@C- &P -   gives a footer with the page number between two
hyphens. This is centered and has a line over it. This footer looks as
follows:

_____
                                  - 5 -

     &o&u&s5&f@r&dt{m/d/y}   will create a shaded bar with solid lines at
the top and bottom. On that bar, to the left will be the file name
(without the extension). The date the booklet was printed will be flush
to the right. Try this one if your printer supports Rectangular Area
Fills. It makes an attractive header bar.

     @rPage &p of &# will place a page indicator at the bottom right
corner of each page of your booklet. For example: Page 5 of 10.

Restarting printing

```
╒═[▪]═══════════════Restart═══════════════╕
│                                          │
│  Begin on            ( ) Page  (♦) Sheet │
│                                          │
│  End on                                  │
│                                          │
│    [ ] Print only second side            │
│                                          │
│         [  OK  ]         [ Cancel ]      │
│                                          │
╘══════════════════════════════════════════╛
```


     This window is used when recovering from printer failures during
previous runs of BOOKLETS. That is, if you have a paper jam on the third
sheet, you can rerun BOOKLETS setting Begin on to 3 and it will not
reprint the first two sheets. End on is the last sheet to be printed.
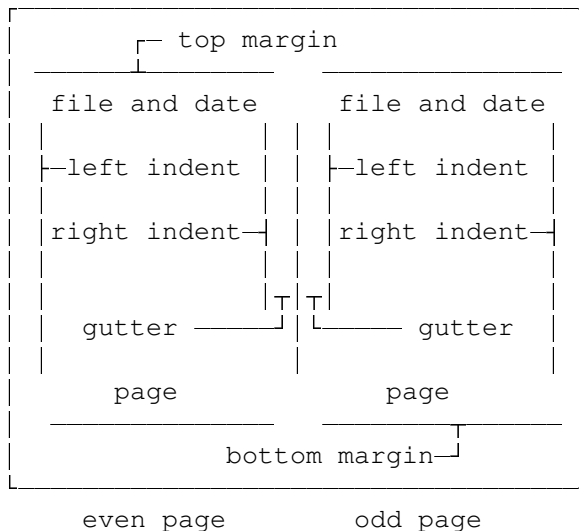
    If you select the Page radio-button, Begin on and End on refer to
page numbers. BOOKLETS will reprint starting with the sheet which has
the page number from the Begin on field. It ends printing when it has
printed the sheet containing the End on page number.

    Check the Print only second side check-box when you wish to reprint
using previously printed first sides.

    See RECOVERING FROM PRINTER ERRORS below for a discussion of printer
error recovery.

MARGINS

    Illustration on left indent, right indent, top and bottom margins,
and gutters.

```
  ┌─────────────────────────────────────┐
  │     ┌─ top margin                    │
  │ ─────────┴──      ──────────────     │
  │  file and date      file and date    │
  │ │ │          │ │ │              │ │   │
  │ ├─left indent │ │ ├─left indent │ │   │
  │ │ │          │ │ │              │ │   │
  │ │right indent─┤ │ │right indent─┤ │   │
  │ │ │          │ │ │              │ │   │
  │ │ │        │┬│┬│              │ │   │
  │   gutter ───────┘ └───── gutter │ │   │
  │ │ │          │              │ │   │
  │     page              page          │
  │ ─────────────      ───────────      │
  │       bottom margin─┐                │
  │                                       │
  └─────────────────────────────────────┘
      even page          odd page
```

Laser printers have an unprintable area of about three columns around the
edges of the paper. A left indent of three (on a LaserJet) is required
to prevent loss of characters on the left edge of the paper. Likewise, a
right indent of three is also needed. If your printer clips characters
at the end of the right side of the paper it is because the unprintable
region is larger than three columns. To correct this you will need to
adjust the left and right indents. A similar situation exists with the
top and bottom margins. If you get character clipping from your print
out, increase the these margins.

    With mono-spaced 12 point fonts you can compute the characters which
can be printed across the logical page. The formula for this is:

  C = Truncate((L * 16.67 - 1)/2)-RightIndent-LeftIndent-Gutter

    L is the long dimension of the page
    C is the characters per line on the logical page

For example on 8.5x11 inch paper (LETTER) with a three column left indent
and no gutter, the formula is:

  C = Truncate((11 * 16.67 - 1)/2) - 3

which gives 88 characters per logical page. Remember that the left
indent must be at least three characters because of the unprintable left
margin.

WORD PROCESSOR DOCUMENTS

BOOKLET has the ability to handle documents from most word processors
provided that you get the word processor to apply its printer formatting
first. Typically, you do this by having the word processor "print" the
document to a disk file. The file thus created will contain Printer
Control Language (PCL) codes that manage the font selection and
formatting of the document when it is printed. BOOKLET will process
these codes and modify them appropriately for the reduced sized document
it produces.

For example, if you are using Microsoft Word for DOS (version 5.5) and
Microsoft Word for Windows, select "File", "Print", in the dialog box
which comes up, select "to File" then fill in the name of the file to be
created. (WinWord will pup up a dialog box for the name.) This will
cause Word to format the file as if it were printing it, but put the
output in the file you named.

For both the DOS and Windows version of WordPerfect you create a PCL file
by setting the printer to be a disk file. This is achieved by setting the
printer port to a file name instead of to the normal port such as LPT1:,
COM2: etc.

For WP DOS this is achieved with the keystrokes Shift-F7,S,3,2,8 and then
enter a file name at the prompt. Continue hitting Enter until you are
back at the first menu and then select the appropriate print option.

For WPWIN, with the mouse, select "File", "Print", "Select", "Setup", and
"Port" from the Destination Group. This will produce a drop down dialog
box. Select File. You will then be placed in an edit box so that you can
enter a file name. After entering this just "OK" your way back, select
the printer and print from the opening print dialog box.

Remember to go back and repeat the above procedures to restore the port
selection to the one to which you printer is connected.

Most other word processors will have a similar mechanism. Remember, if
you enter a file name without a path, it will be created in whatever is
the default directory at the time. Therefore, it is better to enter a
full path for the file name. It is also a good idea to use a convention
for the suffix of your filename such as "PCL". (E.g. the file could be
named OUTPUT.PCL). File suffixes will help you keep things straight.

Remember, BOOKLET does not create any fonts. It will scale any font
specification in your document and leave it up to your printer to pick

the closest match. Sometimes this match is not compatible with the
formatting precision of your document. If you have a printer with built
in scaleable fonts (such as the Hewlett Packhard LaserJet III) use those
when you format your document. See also FONT SELECTION on page (?).

RECOVERING FROM PRINTER ERRORS

        BOOKLETS will detect and recover from temporary print interruptions
such as Out of Paper or Printer Not Ready. It will display a message
when it has detected such a condition and will erase the message and
resume printing once you have corrected the problem. It may display an
error number rather than a text message. These are traps for errors for
which I do not know the meaning. Should one of these occur, you will be
given the option of Retrying or Aborting the printing. The state of the
printer may be lost due to the error. If so, continuing will not produce
correct output.

        One cause of print interruption is paper jams. Recovery from these
may take some effort on your part. Generally Laser printers will reprint
pages involved in paper jams. If you let it do so during the second side
printing of your document, you may find that the back sides may not be
printed on the appropriate front side. If the original page is
undamaged, you should re feed it. Otherwise, you can feed a blank page
for the reprint and use Restart to reprint the damaged page.

        It may be simplest to abort printing when the jam occurs. You then
reset the printer and start again using Restart. You can reprint the
sheet involved with the jam then you can resume printing of the second
sides. Note: When you restart printing of the second sides, BOOKLETS
assumes you have already placed the first sides into the paper feed tray
ready for printing. It does not prompt you for this.

        If you find it necessary to stop BOOKLETS from printing at any time,
just press the ESC key. BOOKLETS will stop and offer you the chance to
continue or abort the printing.

PAPER CURL

        Most problems with jamming are caused by paper curl. The heat of
the printing tends to cause paper to warp. There are two things you can
do to minimize this problem. The first is to use good quality laser
printer paper stock. The second is to manually take the curl out of the
paper. Since good quality paper costs up to three times ordinary copier
paper, the second option is often chosen.

        Take the output from the first pass printing. Hold it face up by
the short sides. Find a sharp edge, such as the edge of a desk. Draw
the paper across the edge as if you were polishing shoes with it. This
will introduce a curl opposite the one caused by the printer.

FONT SELECTION

        When BOOKLETS prints a document containing font selection codes, it
converts those codes by scaling the pitch and point size parts of the

code. These are scaled such that the effect is for fonts to be specified
with all the same type face characteristics as the original, but with the
size of the type face about two thirds the original.

     If the printer you are using is a LaserJet III and you have selected
a scaleable type face, then the printout will be a page of text which is
an image of the original but two thirds the size. When the selected type
face is not scaleable, the printer will use a font selection matching
algorithm. Hewlett-Packard printers use a priority selection scheme
which considers, in order of priority, orientation, symbol set, pitch (if
the font is not proportional), font point size, type face style, and
stroke weight. For a full treatment of this algorithm, see your
printer's reference manual.

     The effect of this algorithm is for the printer to use a font it
believes is the "closest" to what was requested. For BOOKLETS, in most
cases this means it will use the 16.67 character per inch lineprinter
font. Even when there is a small font with the right type face for the
printer to select, the results may not be what you would expect. The
selection algorithm may result in a font which does not work well for the
reduced document. This will often be the case when you have used
proportional fonts and proportional spacing in your document. The result
may be words overlapping each other.

     There is not much BOOKLETS can do about problems of font selection.
You can experiment with different fonts to find the most pleasing result.

     Other difficulties you may have with format transformations are that
centering and tab spacing may not scale proportionally. This is due to
differences between the scaled font size and the actual font used by the
printer. If you use spaces to do your formatting and stick to one font
size, the output will generally look correct.

Also, often the small fonts selected by the font scaling do not have <u>bold</u>
or <u>italic</u> type faces. If this is the case, you will lose these accents.
Underline is always present (except for the DeskJet series printers), so
you can substitute it.

Revision History:

 1.0 - Created from BOOKLET version 3.2
 1.1 - Reduced memory requirements
     - Fixed gutter handling for one-up printing
     - Fixed one-up printing of PCL documents
 1.2 - Added Customizable headers and footers
 1.3 - Added check for out of memory
     - Fixed handling of ESC while printing
     - Fixed "File not found" error
 1.4 - Added BOOKLET.INI file for defaults
     - Added Manual feed second side option
 1.5 - Fixed error in registration code
 1.6 - Added "left handed mouse" configuration
 1.7 - Fixed handling of some Word Perfect PCL output
     - Added Punch marks
     - Added % complete
     - Fixed recognition of lower case printer names
 1.8 - Fixed unclosed files
 1.9 - Changed default top and bottom margins
 2.0 - Added Midline
     - Changed Ringbinder so that the ring margin on back is at bottom
     - Changed output to disk to create front and back files
     - Fixed underline handling on Word Perfect documents
     - Changed Font Scaling to be an exact ratio of the page reduction
 2.1 - Fixed Punch and Staple mark odd page problem
 2.2 - Close Printer between sides
     - Added Default Font specification
     - Fixed some handling of single sided printing
     - Added reverse landscape printing for PCL5 printers
     - Handle "Universal language exit" as emitted by Wordstar
 2.3 - Handle multiple PJL commands (Wordperfect, Windows LJ4 dirver)
     - Handle dynamic PCL units (Used by windows LJ4 driver)