#### **APPENDIX C. 1.**

### APPENDIX C — OTHER SYSTEMS (GRADES) OF BRAILLE, SPECIAL BRAILLE CODES

**1. Other Systems (Grades) of Braille:** English Braille and Uncontracted English Braille constitute the official systems in English-speaking countries. These have previously been designated as Grade 1 Braille (uncontracted braille) and Grade 2 Braille (contracted braille). The following systems are also extant. Manuals for them can be obtained from the American Printing House for the Blind, P.O. Box 6085, 1839 Frankfort Avenue, Louisville, Kentucky 40206-0085.

**a. Grade 3 Braille:** This system, an extension of contracted English Braille (formerly Grade 2 Braille), uses additional contractions and short-form words, and outlining (the omission of vowels). Grade 3 contains more than 500 contracted forms and is used mainly by individuals for their personal convenience.

**b. Braille Shorthand:** This system is designed for use by blind stenographers, and consists of highly contracted forms for writing words, phrases, and letter groups of frequent occurrence in commercial usage.

**c. Revised Braille Grade 1**<sup>1</sup>/<sub>2</sub>**:** This system was much less contracted than current English Braille (formerly Grade 2 Braille), employing only 44 one-cell contractions. Its use was confined mainly to the United States where it was the official code from 1918-1932. Copies of this code are no longer available.

**2. Special Braille Codes:** In addition to literary braille, specialized braille codes are employed for the writing of music, mathematics, scientific formulas, computer notation and materials for other specialized fields. Special codebooks covering these notations are available from the American Printing House for the Blind, P.O. Box 6085, 1839 Frankfort Avenue, Louisville, Kentucky 40206-0085.

**3.** (**4-98**) Electronic Addresses and File Names: Braille all e-mail, website and other Internet addresses, file names, and the like according to the rules of the *Computer Braille Code*, most recent edition. The following is a summary of that Code as it applies to electronic addresses and file names found in non-technical contexts. A list of the most commonly used Computer Braille Code symbols with their print equivalents appears at the end of this section. For a complete list of these symbols and rules for their use, consult *Computer Braille Code*, most recent edition. Examples demonstrating electronic addresses and file names follow **j**. below.

Place a statement similar to the following on the transcriber's notes page:

Computer Braille Code has been used to braille the electronic addresses (file names) in this volume. No contractions are used. Numbers are brailled in the lower part of the cell and no number sign is used. See list of Computer Braille Code symbols on special symbols page.

#### **APPENDIX C. 3.a.**

**b. Typeface:** Ignore any print typeface change or other means of emphasis except capitalization for electronic addresses and file names. (See example 1.)

**c.** Non-Use of Contractions: Braille electronic addresses and file names without contractions. Do not use the contractions for "to," "into," or "by" before a Computer Braille Code indicator. (See example 2.)

**d. Miscellaneous Symbols:** Braille all punctuation marks and other symbols in an electronic address or file name according to the list of Computer Braille Code symbols below. (See **k**. below.)

e. Significant Space: A significant space is a space which is part of the print electronic address or file name and represents one tap of the spacebar. In an electronic address or file name, one blank cell represents one significant space. (See i.(4)(a) below and example 4.)

**f. Capitalization:** To show capitalization, precede a single upper case letter with the Shift indicator, (4-5-6). When two or more consecutive letters appear in upper case, use the Caps Lock indicator, (4-5-6, 3-4-5). Uppercase is terminated either by the Caps Release indicator, (4-5-6, 1-2-6), by the End Computer Braille Code indicator, (4-5-6, 1-5-6), or by a blank cell. When the Caps Lock indicator begins an electronic address or file name, do not use the Begin Computer Braille Code indicator. (See examples 2 and 3.)

**g.** Numbers: Braille the numbers in the lower part of the cell as shown below and do not use the number sign. (See examples 2 and 5.) Ex:

1	2	3	4	5	6	7	8	9	0
••	••	••	••	••	••	••	 • · • •	• •	• •

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#### APPENDIX C. 3.h.

#### h. Spacing:

(1) Embedded addresses and file names: When an electronic address or file name is embedded in text, leave only one blank cell before and after it to represent the blank spaces which, in print, sometimes separate it from the surrounding text. If the electronic address or file name must be divided between lines (see i. below), begin runovers in cell 1. (See examples 1-3.)

(2) **Displayed electronic addresses and file names:** A single print electronic address or file name or a group of them is said to be "displayed" when it is set apart from surrounding text by blank lines, change of margin, etc. (See example 5.)

(a) When an electronic address or file name or a group of such items is displayed, leave one blank line before and one blank line after the displayed material. Begin the first line in cell 1 and runover lines in cell 2.

(b) Do not insert the Begin and End Computer Braille Code indicators unless literary braille words or punctuation appear with the displayed addresses or file names. In such cases, enclose each address within Begin Computer Braille Code and End Computer Braille Code indicators.

(c) If the preceding text does not make it clear that the displayed material is an electronic address or file name, insert a transcriber's note immediately before the displayed material stating that the following electronic address or file name has been brailled using the Computer Braille Code.

**i.** Dividing Embedded or Displayed Electronic Addresses and File Names Between Lines: Braille the entire electronic address or file name, including any opening and closing indicators as required, on one braille line when possible, even if this means leaving a large part of the preceding line blank. When an electronic address is too long for one braille line, proceed as follows: (See examples 2, 4, and 5.)

(1) Divide following a punctuation mark or symbol such as a backslash or tilde, allowing room for the Continuation indicator, even if this means leaving many blank cells at the end of a line.

(2) At the end of each line to be continued, insert the Continuation indicator, (4-5-6, 1-2-3-4-6), immediately following the last braille character. All available cells on the braille line need not be filled.

(3) If, in print, a hyphen is used to show that the line is continued, do not braille this hyphen. (See example 5.)

#### APPENDIX C. 3.i.(4)

(4) Do not divide an electronic address or file name at any of the following locations:

(a) Before or after an empty braille cell which represents a significant space. (See e. above.)

(b) Between the two cells of an indicator or other two-cell symbol.

(c) Following the Begin Computer Braille Code indicator, the Shift indicator, or Caps Lock indicator.

(d) Before the Caps Release indicator or the End Computer Braille Code indicator.

**j. Literary Punctuation:** For punctuation which is adjacent to, but is not part of, the electronic address or file name, use literary braille punctuation marks. Place such marks outside the Computer Braille Code indicators which begin and end the electronic address. (See examples 1, 2, and 4.)

### Examples

#### Example 1:

Is the address of his website **http://www.the\_web.com**?

 •	·· •• ••	••••••••••••••••••••••••••••••••••••••	<b>.</b>	· • • • • • • • • • • • • • • • • • • •	• • • •
 	•••••				· • • • • • • • • • • • • • • • • • • •

#### Example 2:

Send your contributions as e-mail messages to **ted@pin.ca.us**, to **1074.2986@compserve.com**, or leave them as files in directory **MB\PUB\BANA'S\document~repository\braille\history**.

		•       •       •       •       •       •       •       •         •       •       •       •       •       •       •       •       •         •       •       •       •       •       •       •       •       •         •       •       •       •       •       •       •       •       •         •       •       •       •       •       •       •       •       •
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•• •• •• •• ••		
	• • • • • •	

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### Example 3:

Is the capitalization in McDONALD@xyz.com important?

### **Example 4:**

The teacher gave the filename as "c:\my documents\first report."

· · · • · · • • ·		 	•       •       •       •       •       •       •       •       •       •       •       •       •       •       •       •       •       •       •       •       •       •       •       •       •       •       •       •       •       •       •       •       •       •       •       •       •       •       •       •       •       •       •       •       •       •       •       •       •       •       •       •       •       •       •       •       •       •       •       •       •       •       •       •       •       •       •       •       •       •       •       •       •       •       •       •       •       •       •       •       •       •       •       •       •       •       •       •       •       •       •       •       •       •       •       •       •       •       •       •       •       •       •       •       •       •       •       •       •       •       •       •       •       •       •       •       •       •       •
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## Example 5:

Here are some fictional World Wide Web addresses:

```
http://jokes.comunisrv.com/homepages/braillerdreams
http://www2.fgo.org/~janey_/wb/~findit.-
curricul.txt/
http://www.happy.smiles.org
```

This list could be extended indefinitely.

• •	  	:	•	: • • :		•:	•••	•••	•••	•		••	••••	•••	• •	• •	• •	• •	• •			- · •			••		••	- i 🖷	•			
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**k. Computer Braille Code Symbols**: List these signs on the special symbols page. (See App. A. 9.)

## (1) Computer Braille Code Indicators:

Braille	Dots	Meaning
	4-5-6, 3-4-6	Begin Computer Braille Code indicator
	4-5-6, 1-5-6	End Computer Braille Code indicator
· • · •	4-5-6	Shift indicator
	4-5-6, 3-4-5	Caps Lock indicator
· • • · · · • • • ·	4-5-6, 1-2-6	Caps Release indicator
· • • •	4-5-6, 1-2-3-4-6	Continuation indicator

## APPENDIX C. 3.k.(2)

## (2) Miscellaneous Symbols:

Print	Braille	Dots	Meaning
•		4-5-6, 4	accent grave
&	• • • ·	1-2-3-4-6	ampersand
,	•••	3	apostrophe
*	•••	1-6	asterisk; star
@	••	4	at sign
\	• · • • • •	1-2-5-6	backslash
{		4-5-6, 2-4-6	brace, left
}		4-5-6, 1-2-4-5-6	brace, right
[	· • • · · •	2-4-6	bracket, left
]	•••	1-2-4-5-6	bracket, right
٨		4-5	caret; up arrow
•	• · · • · •	1-5-6	colon
,	· · · · · •	6	comma
#	· • •	3-4-5-6	crosshatch; pound; number sign
-	· · · · ·	3-6	minus sign; hyphen
\$	• • • • • •	1-2-4-6	dollar sign
	· • · ·	4-6	dot; decimal; period
=	•••	1-2-3-4-5-6	equals sign
!	· • • · • •	2-3-4-6	exclamation point
>	· • · •	3-4-5	greater than; angle bracket, right
<	• · • · • •	1-2-6	less than; angle bracket, left

# APPENDIX C. 3.k.(2) (cont.)

Print	Braille	Dots	Meaning				
(	•••	1-2-3-5-6	parenthesis, left				
)	•••	2-3-4-5-6	parenthesis, right				
%	•• ••	1-4-6	percent sign				
+	· • · ·	3-4-6	plus sign				
?	• • · •	1-4-5-6	question mark				
"	· · · · •	5	quotation marks, double				
;	 . ● . ●	5-6	semicolon				
/	• • • •	3-4	slash				
~		4-5-6, 4-5	tilde				
_		4-5-6, 4-5-6	underscore				
		4-5-6, 1-2-5-6	vertical line				