

To: /B subgroup
 Subject: Comments on section 10
 From: Van Snyder

1 Edits

Edits refer to 01-007r2. Page and line numbers are displayed in the margin. Absent other instructions, a page and line number or line number range implies all of the indicated text is to be replaced by immediately following text, while a page and line number followed by + (-) indicates that immediately following text is to be inserted after (before) the indicated line. Remarks are noted in the margin, or appear between [and] in the text.

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| The scale factor can be changed only by a P edit descriptor (10.7.5) in a <i>format-specification</i> . [Also see the edit for [218:36] below.] | 169:16 |
| [Editor: Delete “A format ... specification.” It duplicates material only six lines lower!] | 205:5-6 |
| [Editor: Move [207:45] to here.] | 207:23+ |
| [Editor: “ and BS” ⇒ “, BZ, RU, RD, RZ, RN, RC, RP, DC and DP”.] | 208:1 |
| [Editor: Insert “(4.4.4)” after “constant” and then make the whole paragraph a note because this duplicates 4.4.4, which does it better.] | 208:8-10 |
| A format specification is normally interpreted from left to right. The exceptions are format items preceded by a repeat specification <i>r</i> , and format reversion (which is described below). | 208:27-28 |
| [Editor: “to ... representation” ⇒ “between its internal and external representations”.] | 209:37 |
| $(2\frac{1}{2})$ On input, a lower-case e or d is equivalent to the corresponding upper-case letter. | 210:12+ |
| [“plus” is a verb or an adjective, not a noun. Editor: Insert “sign” after “plus” twice.] | 210:14,26 |
| [Editor: Insert “sign” after “minus” twice.] | 210:16,43 |
| [Editor: Insert “sign” after “plus”.] | 210:43 |
| [There’s nothing here that says what an exponent does. Editor: “a <i>sign-</i> ” ⇒ “an optional <i>sign</i> and a ”.] | 211:31,32 |
| The <i>sign</i> and the <i>digit-string</i> specify a power of ten that is multiplied by the number that would be represented if the exponent did not appear. | 211:33+ New ¶ |
| [Editor: Delete “and <i>d</i> ... symbol” because it duplicates material at [211:24-25].] | 212:4-5 |
| The form of the output field is an optional sign, followed immediately by a <i>significand</i> (R415), followed immediately by an exponent <i>exp</i> , with no intervening blanks. If the scale factor is zero, this has the form: | 212:7 |
| The <i>exp</i> specifies a power of ten that multiplies the number represent by the <i>significand</i> . [We need this because there’s nothing that specifies the meaning of the exponent!] | 212:24+ New ¶ |
| [Editor: Insert “sign” after “minus”.] | 212:10 |
| [Editor: Insert “sign” after “minus”.] | 212:42 |
| [Editor: “(” ⇒ “(10.7.7);”] | 213:2 |
| [Editor: Delete the “)”.] | 213:3 |

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| [Editor: Insert “(10.7.7)” after “rounding”.] | 213:34 |
| [Editor: Insert “sign” after “minus”.] | 213:30 |
| [Editor: “higer” ⇒ “higher”.] | 216:11 |
| [Editor: Insert “during output” after “effect”.] | 216:18 |
| [Editor: Either “does not cause” ⇒ “neither causes” or “nor” ⇒ “or”.] | 217:2 |
| [Editor: Insert “sign” after “plus” four times.] | 218:28-30 |
| [Editor: Insert a new sentence “When format control begins, the scale factor for the connection is set to zero.”] | 218:36 |
| [Simplify exposition, and prepare for the possibility of more numeric edit descriptors: Editor: “I, B, ... editing” ⇒ “numeric editing (10.6.1)”.] | 219:25 |
| [This subclause also contains the definition of rounding, which is referenced in several contexts having nothing to do with format control – i.e. list-directed and namelist editing. Editor: Insert “ Rounding and ” before “ RU ”.] | 219:27 |
| [The requirements on rounding ought to be significantly sharper. For example, UP mode allows an arbitrarily large number to be produced, so long as it’s not less than the one being converted. Editor: Insert “the smallest representable value that is” before “greater”.] | 219:40 |
| Editor: Insert “the largest representable value that is” before “less”.] | 219:42 |
| Editor: “the value ... conversion” ⇒ “which one of the two nearest representable values chosen”.] | 219:46-47 |
| [Editor: For consistency put quotes around “upward rounding”, “downward rounding” and “round to zero”.] | 220:5-7 |

2 Don’t know what to do

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| Do the tables in 10.6 need captions and numbers? | |
| The requirement | 205:19-20 |
| C1002 (R1002) The comma used to separate <i>format-items</i> in a <i>format-item-list</i> may be omitted | |
| (1) Between a P edit descriptor and an immediately following F, E, EN, ES, D, or G edit descriptor (10.7.5), | |
| is an incompatibility with the 1966 standard that crept into FORTRAN 77 (compare page 19 of the 1966 standard to [13-2:26-30] of the FORTRAN 77 standard.) | |
| Can we go back to allowing the comma to be omitted even if there’s a repeat specification? | |
| Is the term “constant” defined for the external representation of numbers? | 211:28 |
| It’s interesting that the font for <i>z</i> is different here from its appearance in the table at [212:14-21]. We probably need not do anything. | 212:22 |
| Editor: Did you plan to have two lines between the heading and body, or is there only one because it’s a continuation? | 214:2+ |
| Appears to contradict [209:40-41] | 214:34-36 |
| We can write newlines by specifying ACHAR(10), but we can’t read newlines at all. Is that | 215:16+ |

asymmetry intended?

If there is no such record, how can it become the current record? It seems OK to call a record that doesn't exist the current record if you're getting ready to write it. We already say "thou shalt not read the record if it doesn't exist"?

It would seem that PROCESSOR_DEFINED rounding could also do what's specified here (but of course we shouldn't require it).

Subclause 10.10 needs an introduction.