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.

| | |
|---|---:|
| [Editor: "Instead ... (10.10)" ⇒ "Namelist formatting (10.10) may be indicated by specifying a *namelist-group-name* instead of a *format*".] | 205:8 |
| [Editor: Move [207:45] to here.] | 207:24+ |
| [Editor: " and BZ editing" ⇒ ", BZ, RU, RD, RZ, RN, RC, RP, DC and DP control formatting".] | 208:1 |
| [We could insert "(4.4.4)" after "constant" and then make the whole paragraph a note because this duplicates 4.4.4. But does it better. Editor: Delete.] | 208:8-10 |
| A format specification is normally interpreted from left to right. The exceptions are format items preceded by a repeat specification $r$, and format reversion (which is described below). | 208:27-28 |
| ["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 |
| [Editor: Delete "and $d$ ... symbol" because it duplicates material at [211:24-25].] | 212:4-5 |
| [Editor: Replace "F" by "F$w.d$" at [212:6,38], [213:28] and [215:32].] | |
| [Editor: Insert "sign" after "plus" and after "minus".] | 212:10 |
| [Editor: Insert "sign" after "plus" and after "minus".] | 212:42 |
| [Editor: Insert "sign" after "plus" and after "minus".] | 213:30 |
| [Editor: Insert "during output" after "effect".] | 216:18 |
| [Editor: "nor" ⇒ "or".] | 217:2 |
| [Editor: Insert "sign" after "plus" four times.] | 218:28-30 |
| [Simplify exposition, and prepare for the possibility of more numeric edit descriptors: Editor: "I, B, ... editing" ⇒ "numeric editing (10.6.1) and generalized numeric editing (10.6.4.1)".] | 219:25 |

## 1.1   Subclause 10.7.7 needs to be split

Subclause 10.7.7 is primarily about rounding, and only secondarily about the rounding edit descriptors. It is referenced from subclauses, on list-directed and namelist input/output to specify rounding behaviors (obviously not to specify edit descriptors). It is referenced implicitly (by the word "rounding" without a subclause number) in the discussion of numeric edit descriptors. So as not to confuse the issues, split the subclause (after some editing).

First the editing:

| | |
|---|---|
| [Editor: Insert ", 10.6.1.2.6" after "9.5.1.12".] | 219:28 |

[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" $\Rightarrow$ "which one of the two nearest representable values is chosen".] | 219:46-47 |

Now the rearrangement:

### 10.6.1.2.6 Rounding mode
214:19+

The rounding mode can be specified in an OPEN statement (9.4.1) a data transfer input/output statement (9.5.2) or by an edit descriptor (10.7.7).

[Editor: Move [219:34 – 220:12] to here.]

[Editor: Replace "10.7.7" by "10.6.1.2.6" at [169:9], [173:42], [180:12], [336:23], [249:21] and [349:28].]

## 2   Don't know what to do

| | |
|---|---|
| Is the term "constant" defined for the external representation of numbers? | 211:28 |
| Editor: It's interesting that the font for $z$ 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 asymmetry intended? | 215:16+ |
| 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"? | 218:11-12 |
| It would seem that PROCESSOR_DEFINED rounding could also do what's specified here (but of course we shouldn't require it). | 219:10-14 |
| Subclause 10.10 needs an introduction. | 224:19+ |

## 3   Plea for an MTE

| | |
|---|---|
| The requirement | 205:19-20 |

C1002   (R1002) The comma used to separate *format-item*s in a *format-item-list* 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?