Subject: Comments on Section 2, Unresolved issue 349
From: Van Snyder

1 Edits

Edits refer to 02-007. 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 associated text, while a page and line number followed by + (-) indicates that associated text is to be inserted after (before) the indicated line. Remarks are noted in the margin, or appear between [and] in the text.

[Section 2 is the only section that says "The notation used in this standard is described in 1.7." 9:4-5
If it's not needed in other sections, it's not needed here. Editor: Delete it.]

[Editor: Should "Sections" be plural here?] 11:44

[Editor: Set the second "DATA statements" in obsolescent font.] 15, Table 2.1

[Editor: Insert "(8.2)" after "statements".] 15:5

[Executing an *end-subroutine-stmt* or *end-function-stmt* isn't equivalent to executing a *return-* 16:2
stmt that specifies an alternate return. Editor: Insert "that does not have a *scalar-int-expr*" after
return-stmt.]

[Needs to mention SELECT TYPE. Editor: "and IF" ⇒ "IF constructs, and SELECT TYPE".] 16:14

[The "together with" part at [16:31] doesn't contribute anything. Editor: Delete it, and insert 16:31-32
a comma after "values" at [16:32].]

[Editor: "struvtures" ⇒ "structures".] 17:9

[When I got here, I went looking for the other way that subobjects of complex objects can be 18:1
referenced. Editor: "also" ⇒ "only".]

[Run-on sentence. Editor: ", and" ⇒ "; it".] 18:17

[Sets aren't ordered. Editor: "set" ⇒ "ordered collection".] 19:2

[Run-on sentence. Editor: ", and" ⇒ ";"; Conversion defect: Editor: Insert "**size** is the total" 19:6
after "its".]

[The term "scalar-like" suggests there's something not-quite-scalar like too. Editor: ""scalar- 19:16
like"" ⇒ "scalar" (notice that the quotes disappear).]

[What's "certain" about the restrictions. Editor: "certain" ⇒ "the"; "(16.4.3)" ⇒ "described 19:36
in 16.4.3".]

[Everything is "in this standard" but of all the subclauses of 2.5, only 2.5.2 bothers to say so. 20:7
Nothing's special here. Editor: Delete "in this standard".]

[Subclause 2.5.2 is the only one in 2.5 that has a numbered list, even though others have several 20:8-18
things to describe. Editor: Un-number the list, "(1) It is used" ⇒ "The first use is" at [20:8];
"(2) It is used" ⇒ "The second use is" at [20:13].]

[Keywords aren't used in dummy argument lists. Editor: Insert "actual" before "argument".] 20:13

[Pointers can be defined or undefined, too. Editor: "two" ⇒ "three". Insert "When a pointer is 20:24, 27

associated to a target, or nullified, its association status becomes **defined**. When the association status of a pointer is not predictable, it is said to be **undefined**." before "Section". Insert "and the association status of pointers" after "variables".]

[Why be coy? Editor: "Under certain circumstances," ⇒ "When"; "and" ⇒ "it".]   20:26-27

[Now that 2.5.4 discusses "association" it would be useful to have this subclause before it. 21:7-13
Editor: Move to [20:20-].]

[Expressions are specified to be composed of operands, operators and parentheses, but here and 21:24-26
in the glossary it says that operands only exist in the context of an operator. So the description
of an expression doesn't cover the degenerate cases of variable or function references.]

2.5.8 Operator and operand   21:24

[Editor: "data values (**operands**)" ⇒ "data values. The data values are **operands**. Operands 21:25-26
can be variables, function references, or expressions".]

operand (2.5.8) : A variable, function reference or expression. It may precede or follow an 408:30
operator, or be a complete expression.

2   Unresolved issue 349

The editor liked the former wording of [12:9-10]. The current wording replaces "any" with
"a processor-dependent." The editor says the replacement is an invitation to incompatibilities.
For example, a processor may require alphabetical order. But "any" order prohibits a processor
from imposing the dependencies contemplated in Note 2.2.

The standard should not discuss ordering – especially in a sentence that begins "The set..." –
because that's the province of the linker. If we just take out the part about ordering, the sentence
becomes nearly identical to the first sentence of the paragraph. BUT, it's still defective in not
mentioning that a program can have only one unnamed block data program unit.

A **program** consists of exactly one main program, zero or one unnamed block data program 12:7-10
units, any number (including zero) of other kinds of program units, and any number (including
zero) of external procedures and other entities defined by means other than Fortran.

[Editor: Delete unresolved issue note 349.]   12:10+1ff

3   Remark for the editor

The two-column stuff that's done with the LaTeX `tabular` environment only gets one line 17:35,37
number per `tabular`. I tried `tabbing` and it doesn't get any at all. Here's a macro that gets
line numbers:

`\newcommand{\twoup}[3][1.75in]{\hspace*{0.25in}\makebox[#1][l]{#2}#3}`

It takes three arguments, the first of which is optional with default 1.75in. It indents 0.25in,
puts its second argument left justified in a box having a width given by its first argument, then
emits its third argument. Here's how it looks:

named scalar   a scalar object
a named array   (an array object)

...

an array element   (a scalar subobject)
an array section   (an array subobject)
a structure component   (a scalar or an array subobject)
a substring   (a scalar subobject)

1 The first one was set using `\twoup{named scalar}{a scalar object}`. Here's one set using

2 `\twoup[2.5in]{named scalar}{a scalar object}`:

3   named scalar   a scalar object

4 I didn't look to see how many of these things there are, but I suspect it's a lot. How many do

5 you want to change?