

To: J3
 Subject: Comments on Annex C
 From: Van Snyder
 Date: 26 January 2007

1 Edits

2 Edits refer to 07-007. Page and line numbers are displayed in the margin. Absent other instructions, a
 3 page and line number or line number range implies all of the indicated text is to be replaced by associated
 4 text, while a page and line number followed by + (-) indicates that associated text is to be inserted after
 5 (before) the indicated line. Remarks are noted in the margin, or appear between [and] in the text.

6 [Editor: Insert "(13.7.54)" after "SELECTED_REAL_KIND" and delete the next sentence.] 523:20-23

7 [Editor: Replace "may" by "might".] 523:23

8 The following illustrates how an abstract type can be used as the basis for a collection of related types, 524:29
 9 and how a non-abstract member of that collection can be created by type extension.

10 [Editor: Delete.] 525:1

11 The actual drawing procedure draws a triangle in WINDOW with vertices 525:7-9
 12 at x coordinates OBJECT%POSITION(1)+OBJECT%VERTICES(1, :)
 13 and y coordinates OBJECT%POSITION(2)+OBJECT%VERTICES(2, :):

14 [Editor: Delete ", Temp" and replace "pointers" by "pointer".] 525:34

15 ALLOCATE (CURRENT % NEXT_NODE) ! Create new cell 526:2-5
 16 CURRENT % NEXT_NODE % VALUE = K ! Assign value to new cell
 17 CURRENT => CURRENT % NEXT_NODE ! CURRENT points to new end of list

18 [Editor: Replace3 "may ... name" by "cannot be referenced by way of a pointer".] 532:4-5

19 [Editor: Delete "pseudo".] 532:41

20 [Editor: Replace "pointing to" by "being associated with".] 535:33

21 [Editor: Replace the comma by a semicolon.] 535:35

22 [Editor: Delete "basically".] 536:34

23 [It isn't necessary to explain intrinsic and pointer assignment to illustrate pointers on the left side of an 537:1-37
 24 assignment. Also, the more general case is "Pointers in variable-definition contexts."]

25 **C.4.4 Pointers in variable-definition contexts (7.2.1.3, 16.6.7)"**

26 The appearance of a pointer in a context that requires its value is a reference to its target. Similarly,
 27 where a pointer appears in a variable-definition context the variable that is defined is the target of the
 28 pointer.

29 Executing the program fragment

```
30 REAL, POINTER :: A
31 REAL, TARGET :: B = 10.0
32 A => B
33 A = 42.0
34 PRINT '(F4.1)', B
```

35 produces "42.0" as output.

36 Example 4: 539:14+

37	The following FORALL statement illustrates declaring the index variable within the statement, which	
38	would otherwise require an integer variable of the same name to be accessible in the scope containing	
39	the statement.	
40	FORALL (INTEGER :: COL = 1, SIZE(A,2)) B(COL) = NORM2(A(:,COL))	
41	[Editor: Delete “will”.]	543:24
42	[Editor: Insert “, stream” after “sequential” and replace “two” by “three” twice.]	544:1-2
43	[Editor: Replace “will not” by “cannot”.]	544:15
44	[Editor: Replace “If ... positioned” by “If the next I/O operation on a file after a nonadvancing write	544:18-21
45	is a rewind, backspace, end file or close operation, the file is positioned”.]	
46	[Editor: Replace “will contain” by “is assigned”.]	544:24
47	[Editor: Replace “this” by “the”.]	544:25
48	[Editor: Replace “will contain” by “is”.]	544:26
49	[Editor: Replace “has been” by “is”.]	544:28
50	[Editor: Replace “end-of-record” by “EOR” four times.]	544:28,29,36,38
51	[Editor: Replace “is present” by “appears” and replace “required” by “requires”.]	544:30
52	[Editor: Replace “will be” by “is”.]	544:31
53	[Editor: Replace “was successfully completed” by “completed successfully” and replace “will then be”	544:32
54	by “is”.]	
55	[Editor: Replace “The IOSTAT... will be” by “If the IOSTAT= specifier appears, the specified variable	544:32-33
56	is”.]	
57	[Editor: Replace “will be” by “is” and delete the other “will”.]	544:34
58	[Editor: Replace “continue” by “continues”.]	544:35
59	[Editor: Replace “has been found” by “condition is encountered”.]	544:36
60	[Editor: Replace “The SIZE... will contain” by “If the SIZE= specifier appears, the specified variable	544:38
61	contains”.]	
62	[Editor: Replace “this” by “the”.]	544:39
63	[Editor: Delete “will”.]	545:18
64	[Editor: Replace “Hopefully, the” by “The” and replace “will” by “should”.]	545:20-21
65	[Editor: Replace “will perform” by “performs”.]	545:24
66	[Editor: Replace “will process” by “processes”.]	545:31
67	[Editor: Replace “user” by “program”; the standard is about programs and processors, not programmers	545:36
68	or users.]	
69	[Editor: Replace “When” by “If” and replace “is present” by “appears”.]	546:1
70	[Editor: Replace “was present” by “appears”.]	546:16
71	[Editor: Replace “will have to” by “can”.]	546:17
72	[Editor: Replace “got” by “encountered” and “will” by “can”.]	546:23
73	[Editor: Replace “got” by “encountered”.]	546:25
74	[Editor: Insert “in order” after “required”.]	546:31

75	[Editor: Replace “this” by “the”.]	547:1
76	[Editor: Insert “unless the most recently previous operation on the unit was not a nonadvancing read	548:41
77	operation” after “empty”).]	
78	[Editor: Replace second “the” by “an advancing”.]	549:1
79	[Editor: Replace “will be” by “are”.]	550:34
80	[Editor: Replace “will” by “can be”.]	550:35
81	[Editor: Replace “shall be” by “are”.]	550:45
82	[Editor: Replace “shall translate” by “translates”.]	551:4
83	[Editor: Delete “(or file element)”.]	551:25
84	[Editor: Delete because it’s about non-saved module variables disappearing, which they no longer do.]	551:35-44
85	[Editor: Delete “, SAVE” because it’s no longer needed.]	553:25
86	[Editor: Replace “This ... application” by “An interface body specifies an explicit interface (12.4.2.1)”.]	554:3-6
87	[Editor: Replace “and” by a comma and insert “, and other characteristics that require explicit interface”	554:4
88	after “arguments”.]	
89	Because dummy argument names in an interface body for an external procedure are not required to be	554:24+
90	the same as in the procedure definition, different versions may be constructed for different applications	
91	using argument keywords appropriate to each application.	
92	[Editor: Insert “in the following example” before “is”.]	560:14
93	[Editor: Delete “, save” because it’s no longer needed.]	560:18
94	[Editor: Replace “modules” by “submodules”.]	563:8
95	[Editor: Insert “procedure” after “intrinsic”.]	563:24
96	[Editor: Delete “and FORTRAN 66” and “and 66”.]	566:21
97	[Editor: Delete “FORTRAN 66 and”.]	566:24-25
98	[Editor: Delete “FORTRAN 66/”.]	566:33
99	[Editor: Insert a new paragraph:]	568:23+
100	If a nonpointer dummy argument has the TARGET attribute and the corresponding actual argument	
101	does not, any pointers that become associated with the dummy argument, and therefore with the actual	
102	argument, during execution of the procedure, become undefined when execution of the procedure	
103	completes.	
104	[Editor: Replace “intrinsic” by “intrinsic procedures”.]	570:2
105	[Editor: Move C.12.2 to [569:40+], after the changes noted below through page 582.]	578:13ff
106	[Editor: Insert “or binding” after “specific procedure” thrice.]	578:15-18
107	[Editor: Replace “specific procedures” by “interfaces of specific procedures or bindings”.]	578:20
108	[Editor: Replace “and rank” by “rank, and whether the dummy argument has the pointer or allocatable	578:21
109	attribute”.]	
110	[Editor: Insert “in 12.4.3.4.5” after “(2)” because the earlier reference to that subclause is on the previous	579:6
111	page and it’s not clear to what “(2)” applies.]	
112	[Editor: Insert a new paragraph:]	582:23+
113	If one dummy argument has the POINTER attribute and a corresponding argument in the other interface	

114	body has the ALLOCATABLE attribute the generic interface is not ambiguous. If one dummy argument	
115	has either the POINTER or ALLOCATABLE attribute and a corresponding argument in the other	
116	interface body has neither attribute, the generic interface might be ambiguous.	
117	[Editor: Delete “we construct” and replace “will record” by “records”.]	586:13
118	[Editor: Replace “will be” by “is” thrice.]	586:14,29,30
119	[Editor: Replace “Count ... COUNT” by “It is necessary to count the down spins at the grid points,	586:25-26
120	so COUNT is corrected”, then delete “writing”.]	
121	[Editor: Replace “Our” by “The” and replace “these” by “the”, delete “what ... the”, unquote “like-	586:28
122	minded nearest neighbors”.]	
123	[Editor: Replace “will be” by “are”.]	586:31
124	[Editor: Replace “will occur” by “occurs”.]	586:31-32
125	[Editor: Delete “by”.]	586:33
126	[Editor: Replace “we guarantee” by “guarantees”.]	586:34
127	[Editor: Move subclause C.13.10 to [569:41+]	591:1-4