

Subject: EXIT from any named construct other than WHERE or FORALL
 From: Van Snyder
 Reference: 03-258r1, section 2.1.2, 04-109, 04-156r1, 04-395r1, WG5/N1626-J3-024

1 Detailed Specification

2 Allow an EXIT statement with a *do-construct-name* that is the same as the name of any enclosing
 3 construct other than WHERE or FORALL, not just a DO construct. When the EXIT statement
 4 is executed, execution of the named construct is terminated. For compatibility, an EXIT statement
 5 without a *do-construct-name* continues to refer to the nearest enclosing DO construct.

2 Editorial strategy

7 Replace *do-construct-name* in R844 with *construct-name*. Allow it to be the name of any construct that
 8 encloses the EXIT statement. Add a new subclause 8.1.7 that describes the EXIT statement but not
 9 loop termination. Specify there that the EXIT applies to the construct named by the *construct-name*.
 10 Do not change the interpretation of an EXIT statement that doesn't mention a *construct-name*.

3 Edits

12 Edits refer to 04-007. Page and line numbers are displayed in the margin. Absent other instructions, a
 13 page and line number or line number range implies all of the indicated text is to be replaced by associated
 14 text, while a page and line number followed by + (-) indicates that associated text is to be inserted after
 15 (before) the indicated line. Remarks are noted in the margin, or appear between [and] in the text.

16 [Editor: Delete the first two paragraphs and the syntax rules for EXIT from **8.1.6.4.4 Loop termination**.] 168:4-10

17 [Editor: In the third textual paragraph of **8.1.6.4.4 Loop termination**, which becomes the first paragraph 168:11
 18 as a result of the previous edit, “The loop” ⇒ “A loop”.]

19 [Editor: In item (3) in the numbered list in **8.1.6.4.4 Loop termination**, “outer DO construct” ⇒ “outer 168:16
 20 construct”.]

21 [Editor: Insert a new subclause immediately before 8.2:] 169:1-

8.1.7 EXIT statement

23 The EXIT statement provides one way of terminating a construct.

24 R844 *exit-stmt* is EXIT [*construct-name*]

25 C829 (R844) If an *exit-stmt* refers to a *construct-name*, it shall be within that construct; otherwise,
 26 it shall be within the range of at least one *do-construct*.

27 An EXIT statement belongs to a particular construct. If the EXIT statement refers to a construct name,
 28 it belongs to that construct; otherwise, it belongs to the innermost DO construct in which it appears.

29 When an EXIT statement that belongs to a DO construct is executed, it terminates the loop (8.1.6.4.4)
 30 and any active loops contained within the terminated loop. When an EXIT statement that belongs to
 31 a non-DO construct is executed, it terminates any active loops contained within that construct, and
 32 completes execution of that construct.

33 [Editor: Delete the first “DO” from the definition of **belong** in the glossary.] 426:8