Subject: Comments on Section 5
From: Van Snyder
References: 02-165

1   Edits

Edits refer to 02-007r1. 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.

[The assertion "This attribute may be specified for any of these entities by an EXTERNAL   80:23-26
statement (12.3.2.2)" is contradicted by 12.3.2.2 [262:4-5]. The next sentence, *viz.* "It may be specified for any of these entities other than a block data subprogram by a type declaration statement, a procedure declaration statement (12.3.2.3), or by the appearance of the name as a specific procedure name in an interface body (12.3.2.1)" is contradicted by C512 [70:36-37]. Editor: Replace "This . . . (12.3.2.1)" by the following:]

This attribute may be explicitly specified by

    (1)   The *external-name* in an *external-stmt* (12.3.2.2),

    (2)   The *object-name* in a *type-declaration-stmt* in which the EXTERNAL *attr-spec* (5.1) appears,

    (3)   The *proc-entity-name* in a *proc-declaration-stmt* (12.3.2.3), or

    (4)   The *function-name* in the *function-stmt* or the *subroutine-name* in the *subroutine-stmt* that introduces an interface body (12.3.2.1).

[But don't do this if 02-165 passes, because doing it will invalidate the edits therein.]

[Imprecise.]   80:36-38+
If a name has the EXTERNAL attribute and it

    (1)   Has the POINTER attribute, then it is the name of a procedure pointer.

    (2)   Is a dummy argument, then it is a dummy procedure.

    (3)   Is not a dummy argument, and has the EXTERNAL attribute because it is an *object-name* in a *type-declaration-stmt* in which the EXTERNAL *attr-spec* appears, it is the *proc-entity-name* in a *proc-declaration-stmt*, or it is the *function-name* in the *function-stmt* or the *subroutine-name* in the *subroutine-stmt* that introduces an interface body, then it is the name of an external procedure.

    (4)   Is not a dummy argument, and is referenced as an actual argument, as the *procedure-name* in a *function-reference* or *call-stmt*, or as the *procedure-name* in a *pointer-assignment-stmt*, then it is the name of an external procedure.

Otherwise it is the name of either an external procedure or a block data program unit. A name that is the name of a block data program unit shall not be specified to have the EXTERNAL attribute except by the appearance of the name as the *external-name* in an *external-stmt*.

[Note 5.14 misleadingly incomplete, and the above edit makes it unnecessary. Editor: Delete it.]

1   [This is in Section 12, not Section 5 – but it depends on the above edits. Editor: "If ... 257:20-24
2   interface" ⇒ "The name of an interface body\index{name!interface body} is the *function-*
3   *name* in the *function-stmt* or the *subroutine-name* in the *subroutine-stmt* that introduces the
4   interface body. If an interface body is accessible in a scoping unit, procedure entities with the
5   same name have the explicit interface given by the interface body." But don't do this if 02-165
6   passes, because doing it will invalidate the edits therein.]