Subject: Section 14 doesn't account for type-bound procedures

From: Van Snyder References: 01-115

## 1 Introduction

Section 14 doesn't account for type-bound identifiers. It also refers to procedure names where it ought to refer to identifiers, thereby not accounting for defined operators or user-defined derived-type input/output.

## 2 Edits

Edits refer to 01-007r1. 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 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: After "names" add "or generic bindings (4.5.1.5)".]	342:
[Editor: "procedure name" $\Rightarrow$ "identifier".]	344:
[Editor: After "reference" insert ", is a generic type-bound reference".]	344:
[Editor: After "reference" insert ", is a specific type-bound reference, is a reference to a user-defined derived-type input/output procedure".]	344:3
[Editor: "A procedure name" $\Rightarrow$ "An identifier".]	344:3
[Editor: "an interface block with that name" $\Rightarrow$ "a generic interface with a generic-spec other than a dtio-generic-spec that specifies that identifier".]	344:4
[Editor: "name" $\Rightarrow$ "identifier" twice.]	344:4
[Editor: "procedure name" $\Rightarrow$ "identifier".]	344:4
[Editor: "name" $\Rightarrow$ "identifier".]	344:4
[Editor: "name" $\Rightarrow$ "identifier" twice.]	345:1
$(1\frac{1}{2})$ A reference is established to be to a generic type-bound interface if it is of the form $data-ref~\%~binding-name$ and $binding-name$ is the $generic-name$ in a $generic-spec$ in a binding specified using GENERIC within the definition of the declared type of $data-ref$ .	345:3
$[Editor: "names" \Rightarrow "identifiers".]$	345:2
(1) If the declared types of the actual arguments that are not procedures or procedure pointers are type compatible with, and have the same kind type parameters as the corresponding dummy arguments of one of the nonoverridden specific interfaces of a generic interface	345:2
[Editor: "name" $\Rightarrow$ "identifier".]	345:2
[Editor: "interface block that provides that" $\Rightarrow$ "generic interface that provides that specific".]	345:2

[Editor: "procedure" $\Rightarrow$ "interface".]	345:25
$[Editor: "name" \Rightarrow "identifier".]$	345:27
$\overline{\text{[Editor: "interface block that provides that"}} \Rightarrow \text{"generic interface that provides that specific".]}$	345:29-30
[Editor: "name" $\Rightarrow$ "identifier".]	346:28
[Editor: "name is a function name or subroutine name, the name" $\Rightarrow$ "identifier refers to a function or subroutine, the identifier".]	346:30-31
If the procedure has a passed-object dummy argument, the reference is to the procedure named	346:32+
by the $procedure$ -name specified by a $proc$ -binding-stmt that is associated with $(4.5.1.5)$ the	New $\P$
dynamic type of the actual argument that corresponds to the passed-object dummy argument.	
NULL() shall not be specified in that proc-binding-stmt.	

[Editor: Add a new section, after – not a subsection of – 14.1.2.4.1.]

## 14.1.2.4.1 $\frac{1}{2}$ Resolving references to type-bound generic procedures

If a type-bound generic interface is specified by data-ref % binding-name in a function reference or call statement:

- (1) If the reference is consistent with a specific interfaces in the generic binding associated with (4.5.1.5) the declared type of the *data-ref* that has a *generic-name* that is the same as the *binding-name*, that interface is selected.
- (2) Otherwise, the reference shall be consistent with an elemental reference to a specific interfaces in the generic binding associated with the declared type of the *data-ref* that has a *generic-name* that is the same as the *binding-name*, that interface is selected.
- $(2\frac{1}{3})$  A reference is established to be to a specific type-bound procedure if it is of the form data 346:42+ ref % binding-name and binding-name is the binding-name in a specific-binding within the definition of the declared type of data-ref.
- $(2\frac{2}{3})$  A reference is established to be to a user-defined derived-type input/output procedure by the rules specified in 9.5.4.4.3.
- $(5\frac{1}{2})$  If the reference is of the form data-ref % binding-name and binding-name is the same 347:2+ as one specified in a specific-binding associated with (4.5.1.5) the declared type of data-ref, then the reference is to the procedure-name, if any, specified in the specific-binding associated with the dynamic type of data-ref and that has the same binding-name. If that specific-binding is a deferred binding (4.5.1.5), an error condition occurs.