

## ISO/IEC JTC1/SC22/WG5 N1452

### Suggested Answers for Odd Interpretations

#### Interpretation 7

ANSWER:

Yes.

DISCUSSION:

It is clear from the wording of the standard, as cited in the question, that this is allowed. Furthermore, it is clear from the wording in the CMPLX intrinsic that this was not unintentional.

EDIT:

None.

#### Interpretation 9

ANSWER:

(1) Yes.

(2) Yes, but this should not imply that the MOLD argument needs to be defined. An edit is supplied to clarify this situation.

EDIT:

[219:28+] Add new sentence to end of paragraph:

"If the MOLD argument to this function is a variable, it need not be defined."

#### Interpretation 13

See interp 67.

#### Interpretation 27

ANSWER:

The left tab limit is the point where the file was positioned at the start of execution of the statement.

DISCUSSION:

This follows from the second sentence of 10.6.1.1, which states

"Immediately prior to data transfer, the left tab limit becomes defined as the character position of the current record."

EDIT:

None.

#### Interpretation 67

ANSWER:

The requirement is intentional.

{No discussion section.}

EDIT:

None.

#### Interpretation 71

QUESTION:

{Add a new question, with the example:}

(/ ('ABC'(:J/2), J=4,2) /)

{This has an indeterminate character length.}

ANSWER:

{(1) remains the same.}

(2) No, the <ac-value> has an indeterminate character length and so cannot satisfy the requirement for the lengths to be the same. The edits below clarify this situation.

(3) No, one <ac-value> has an indeterminate character length and so cannot satisfy the requirement for the lengths to be the same.

(4) No, the <ac-value> has an indeterminate character length.

EDIT:

{First edit remains. Suggested replacement for the second edit:}

[45:38+] Add to end of paragraph:

"The character length of an *ac-value* in a zero-trip *ac-implied-do* shall not depend on the value of the implied DO variable and shall not depend on the value of an expression that is not an initialization expression."

{NOTE TO J3/WG5:

This satisfies Henry's final anomaly with the previous answer, as

$( / (V,I=1,0) / )$

and

$( / ( / (V,I=1,0) / ) / )$

are now both allowed. It also satisfies one of Kurt's many objections, though perhaps not the others.

*Interpretation F90/49*

Postponed awaiting further information (WG5 ballot comments, 95-044?).

*Interpretation F90/145*

Postponed awaiting further information (X3J3 ballot comments, 1996?).

*Interpretation F90/207*

Alter DISCUSSION:

If the radix is 10 (e.g. for BCD machines) it is simply not possible for the models to be the same. For a 2-digit BCD machine, the 13.7.1 model gives a number range of  $\pm 99$ ; ignoring the (irrelevant) negative numbers, the bit model either has more numbers (128) or fewer numbers (64) than the BCD model (100).

Given this irreconcilable incompatibility, it is best to let the bit intrinsics manipulate the bits and not attempt to pretend that the models can ever match. This allows bit manipulation to be efficient on such machines, but loses the connection between the "normal" value and the "bit" value (which must be at least partially lost no matter how inefficient we make it).

In the edit, change "==" to "=".

After the edit, comment that "/=" is really the not-equal symbol.

*Interpretation F90/209*

ANSWER:

(a) The PAUSE statement has been deleted from Fortran 95, so a standard-conforming program shall not contain such a statement.

{Alternative 1}

No, a STOP statement may not be executed in this situation. Executing a STOP statement causes normal termination of execution, which closes all files (9.3.5), and this is equivalent to executing a CLOSE statement, which is prohibited by 9.7. A clarifying edit is supplied.

{Alternative 2}

Yes, a STOP statement may be executed in a function referenced in an I/O statement. The state of the file at the end of execution is processor dependent.

EDIT: (For alternative 1)

[160:20] after "statement" insert "or STOP statement".

Interpretation F90/211

ANSWER:

{ Alternative 1 }

(1) Yes, this constraint does not apply to the example. Nor does 14.1.2.3, which only applies between pairs of specific procedures - there is only one specific procedure in this example.

Note: However, processors are required to diagnose violations of the requirements of 14.1.2.3 - see 1.5 item 6.

(2) Yes, the constraint should be fixed to prohibit the examples.

Note: As it stands, the second example is not prohibited either by the constraint or by 14.1.2.3.

EDIT:

[194:21-23] Replace with

"Constraint: A <procedure-name> in a <module-procedure-stmt> shall not specify a procedure that is specified previously in any <module-procedure-stmt> in any accessible interface block with the same generic identifier."

{ Alternative 2 }

(1) {as above}

(2) No, the constraint should not be fixed. The second example is standard-conforming.

EDIT: None.

Interpretation 66

Making virtually all programs that catch i/o error non-conforming seems to be unhelpful. We recommend the answer as it stands.

Interpretation 68

{ Alter the discussion as follows. }

Item 1, after "external-file-unit" append

"; it is, however, permissible. An edit is added to clarify this".

Item 2: delete the last sentence.

After item 3 insert a new paragraph:

"Note however that a processor extension may have two units connected to the same file - e.g. unit 6 and the \* output unit might both identify the user's display. This is not detectable by a standard-conforming program, but in this case closing unit 6 would not necessarily affect output to the display via \*."

Interpretation 86

Add to the ANSWER section:

"(2) Not applicable."

and

"(4) Not applicable."