

ISO/IEC JTC1/SC22/WG5 N1153

To: WG5
From: Miles Ellis
Subject: Responses to Fortran 95 CD ballot

The following is a composite list of the responses to the comments received during the CD ballot on Fortran 95 which were approved by WG5 at its meeting in San Diego. The work was divided between five subgroups, and this list has been produced by combining the various papers approved by WG5 as a whole. As a result of this process, different parts of this document are in different formats. A more readable "Disposition of comments" document will be produced in due course.

xiii:2. no -- instead of suggested edit,
delete ":1996"
xiii:24.yes
xiii:29.yes
xiv:7.yes
xiv:9.yes
xiv:13.yes
xiv:16.yes
xiv:16-18. yes -- The reference should be to xiv:16-19.
xiv:20.yes
xiv:26-32.yes
xiv:38.yes
xv:8-9.yes
xv:28-29.yes
xv:30. no -- instead of suggested edit,
"Note that this does not apply to pointers, only arrays declared with
the ALLOCATABLE attribute."
xvi:23.yes
xvi:25.yes
xvi:28,.yes
xvii:3.yes
1:15.yes
1:16,17.yes
1:18.yes
1:19.yes
1:21.yes
1:22,24,26.yes
1:,29,31,33.yes
1:34.yes
1:35.yes
3:15. no -- instead of suggested edit,
change to read "Real and double precision DO variables,"
3:25. no -- apply edit in paper N1142
3:26.yes
3:35+. no -- as long as interpretation 183 passes the X3J3 letter ballot.
4:30.yes

5:1.yes
5:1.yes
6:34.yes
7:13.yes
7:17.yes -- The reference should be to 7:16
7:17-18.yes
9:5. no -- instead of suggested edit,
Replace the sentence that starts on 9:4 with "The syntax ..." with
"The notation used in this standard is described in 1.6."
13:43.yes
14:1.yes
14:4-17.yes
[14:4-17] (Table 2.2) Throughout the table, including its note
14:16-17. no -- see next item
14:16-17. no -- instead of suggested edit,
change 14.16-17 to
"Notes for Table 2.2:
1) Misc declarations are PARAMETER statements, IMPLICIT statements,
Type declaration statements, and Specification statements.
2) Derived type definitions are also scoping units, but they do not
contain any of the above statements, and so have not been
listed in the table.
3) The scoping unit of a module does not include any module
subprograms that the module contains."
[Editor can format. Note that the words in note 1) should agree with
the above item 14:4-17.]
Rationale: Be consistent with 75:20.
14:38.yes
15:8.yes
15:20.yes
17:19.yes
17:27.yes
19:5.yes
22:4-14.yes
25:4.yes
26:13.yes
26:34.yes
29:35 (US Editorial) NO.
Suggested editorial improvement would introduce a technical flaw.
30:24 (US Quality) YES.
30:26 (US Quality) Alternative edit accepted:
change sentence to read:
"An array object has a type and type parameters..."
31:1-2 (US Editorial) YES.
31:15-17 (US Editorial) YES.
32:39-43 (US Editorial) YES.

- 33:4 (US Editorial) YES.
- 33:9-11 (US Editorial) YES.
- 33:12 (France & US Editorial) YES. (Same edit in both cases).
- 33:20 (US Editorial) YES.
- 33:22-23 (US Editorial) YES.
- 34:27 (US Quality) YES.
- 36:30,31 (US Editorial) YES.
- 37:7,11 (US Editorial) YES.
- 37:12-14 (US Editorial) YES.
- 37:39 (additional UK substantive comment). yes. Add to end of paragraph:
A <<direct component>> of a derived type is a component at any level of
component selection for which no ancestor component has the POINTER
attribute.
[Assigned to X3J3 for further editorial work.]
- 38:8 (US Editorial) YES.
- 38:9-10 (UK Editorial) YES.
- 38:10 Additional edit: After "explicit initialization" insert "(5.1)".
- 38:11 (US Quality) YES.
- 38:35-36 (US Editorial) YES.
- 39:25 (UK Substantive) YES.
- 39:38 (US Quality) YES.
- 39:42 (US Quality) NO; edit missing from N1135 accepted as amended:
[39:42] change "If an object" to "If <component-name>"
[39:44] change "for the" to "for that"
- 39:45-47 (US Problem 7) NO, alternative edit:
Delete "<<Explicit initialization>> ... (5.2.10)."
[49:47] After "Explicit initialization"
Insert "(5.1) in a type declaration statement"
- 40:13 (Japan, UK & US Editorial) YES.
- 40:16 (UK Editorial) YES.
- 40:27 (Germany Editorial) NO.
- 40:28 (Germany Editorial) NO.
- 41:8 (Germany Editorial) YES.
- 42:1 (US Quality) YES.
- 42:1-3 (US Quality) YES.
- 42:3 Additional edit
Change "initially disassociated" to "default initialized to".
- 42:12 (US Quality) Alternative edit
Make this text part of Note 4.27.
- 42:16 (Germany Editorial) NO.
- 42:17 (Germany Editorial) YES.
- 42:28 (Germany Editorial) NO.
- 42:34 (US Quality) YES.
- 42:38 (Germany Editorial) YES.
- 42:42 (Germany Editorial) NO.
- 43:1 (US Quality) YES.

- 43:5 (US Editorial) YES.
- 43.20 (Germany Editorial) NO.
- 44.6 (Germany Editorial) NO.
- 44.7 (Germany Editorial) NO.
- 44.16 (Germany Editorial) NO.
- 44.17 (Germany Editorial) NO.
- 44.18 (Germany Editorial) YES.
- 44.19 (Germany Editorial) NO.
- 44:28+ (US Quality) YES.
- 45:29 (US Quality) NO. {Unnecessary technical change}.
- 46.6 (Germany Editorial) YES.
- 46:25 (US Quality) YES.
- 47.10 (Germany Editorial) YES.
- 48:19 (US Problem 2) YES.
- 48:42-45 (US Quality) YES.
- 49:14-16 Additional edit: Replace "If an ... (4.4.1). The"
With:
"If an <entity-decl> contains <initialization> and the
<object-name> does not have the PARAMETER attribute, the entity
is a variable with <<explicit initialization>>. Explicit
initialization alternatively may be specified in a DATA statement
unless the variable is of a derived type for which default
initialization is specified.
- If <initialization> is <= initialization-expr>, the"
- 49:22 (US Quality) YES.
- 49:36 (US Quality) YES.
- 50:41 (US Problem 8) NO,
instead delete "whose interface is explicit."
- 51:15 (US Problem 3) NO, The last sentence of the paragraph is to be
deleted, see next edit.
- 51:21 (US Problem 4) Second solution chosen to both problems 3 and 4,
(viz delete the last sentence on line 51:15 and
add a note following the list), amended by
- adding "unless the function is not invoked" to
the end of the first sentence, and
- changing the second sentence of the note to
begin with "This is because the" instead of "The".
- 51.28 (Germany Editorial) NO.
- 51.29 (Germany Editorial) NO.
- 52:31-32 (US Editorial) NO. {Would be inconsistent with 53:16,18,23}.
- 53:5+ Additional edit: Add new item and renumber list:
"As the <pointer-object> of a <pointer-assignment-stmt>."
- 53:13 Additional edit:
After "<stat-variable>" insert "or <allocate-object>".
- 53:16 (US Quality) YES.

- 53:27 (US Quality) YES.
53:29 (US Editorial) YES.
53:37 Additional edit: Change "attribute" to "<attr-spec>".
53:38 Additional edit: Change "attribute" to "<attr-spec>".
53:39 (US Quality) YES.
53:40 (US Problem 5) YES.
53:41 (US Quality) YES.
54.5 (Germany Editorial) NO.
54:40 (US Editorial) YES.
55:6-8 Additional edit:
Change "rank. Its type, ... but"
To "rank, but"
55:10 Additional edit:
Change "declaration statement or in a POINTER"
To "declaration statement, a component definition statement, or
a POINTER".
55:11 (US Editorial) YES.
55:12+ Additional edit: Add new sentence to end of paragraph
"The type and type parameters may be specified in a type
declaration statement or a component definition statement."
55:27-28 (US Editorial) YES.
55:40-56:4 (US Editorial) YES.
56:11-17 (US Problem 9) NO, alternative edit proposed:
[56:12] Add to end of sentence:
"unless the object is a pointer and its target becomes
undefined (14.6.2.1.3 (3))"
[56:16] change "when" to "after"
[56:17] ditto without the reference to ch 14.
58:10 (US Editorial) YES.
59.4 (Germany Editorial) NO.
59.12 (Germany Editorial) NO.
59.22 (Germany Editorial) NO.
60:25 Additional edit: Change "(4.4.1)" to "(5.1)".
60:26 Additional edit:
Replace sentence "Initial values may be ... nullified."
With "Initial values may be provided for variables that are not
dummy arguments, function results, automatic, of a derived
type for which default initialization is specified, and that
do not have the POINTER attribute or the ALLOCATABLE
attribute. Pointers that are not dummy arguments or function
results may be initially nullified."
[NOTE TO EDITOR: If that is too clumsy, the alternative edit is
just to delete the sentence "Initial values may be ... nullified"
because it is unnecessary as well as wrong.]
61:10+ (US Problem 10) YES.
61:11 (US Quality) NO. {Unnecessary technical change.}

- 61:31-32 Additional edit, same editorial improvement as in [62:1-3].
change both occurrences of "DATA statement repeat factor"
to "<data-stmt-repeat>"
- 61:43 (US Quality) YES.
- 62:1-3 (US Editorial) YES.
- 62:5 (US Quality) YES.
- 62:8 (US Quality) YES.
- 62:9 (US Quality) YES.
- 62:11-12 (US Quality) YES.
- 62:17 (US Quality) Yes, amended by changing "maximum <kind-param>" to
"a <kind-param> that specifies the representation method with
the largest decimal exponent range"
- 62:17 (US Quality) YES.
- 62:24 (Germany Editorial) NO.
- 62:28 (Germany Editorial) NO.
- 63:26 (US Quality) YES.
- 63:26+ (US Editorial) Yes, amended by adding the new note to [65:10+]
instead of the suggested [63:26+], and moving the IMPLICIT
statement to immediately follow the PROGRAM statement.
- 64:8 (Germany Editorial) NO.
- 64:13 (Germany Editorial) NO.
- 65:6 (Germany Editorial) NO.
- 65:7 (Germany Editorial) NO.
- 66:32 (US Quality) NO.
Add a new constraint:
"Constraint: A <substring> must not have length zero."
- 66:46+ (US Quality) YES.
- 68:3 (Germany Editorial) NO.
- 68:4 (Germany Editorial) NO.
- 68:21-22
- 68:26-27
- 70:19-20 (US Problem 11) Yes, amended to:
Delete the constraint in [68:26-27].
Delete item (4) in [70:19-20].
Make each of the two sentences in the paragraph in [70:22-25]
into a separate paragraph.
Add a new paragraph [70:30+]
"Equivalence association shall not cause a derived-type object
with default initialization to be associated with an object in
a common block."
- 69:18 (US Editorial) YES.
- 70:17-18 (US Editorial) YES.
- 70:29 (Germany Editorial) NO.
- 71:33 (US Editorial) NO.
- 71:34 (US Quality) NO, already fixed by [62:17].
- 72:3 (Germany Editorial) NO.

- 72:4 (Germany Editorial) NO.
72:13 (US Editorial) YES.
73:8 (US Editorial) YES.
73:30+ (US Quality) Yes, amended by replacing the "were" in the first sentence by "are", and by replacing the last sentence with "A <data-ref> of non-zero rank that ends with a substring range is an array section. A <data-ref> of zero rank that ends with a substring-range is a substring."
73:40 (US Editorial) YES.
74:25 (Germany Editorial) NO.
74:26 (Germany Editorial) NO.
75:9,10 (Japan Editorial) NO, subsumed by US edit following.
75:9 (US Editorial) YES.
75:10 (US Editorial) YES.
75:26 (US Editorial) YES.
77:13 (Japan & US Editorial) YES.
77:15 (Japan Editorial) YES.
77:39-40 (US Quality) NO, alternative edit recommended
replace with "An <allocate-object>, or a subobject of an <allocate-object>, shall not appear in a bound in the same ALLOCATE statement. The <stat-variable> shall not appear in a bound in the same ALLOCATE statement."

78:4 (US Quality) NO, alternative edit: after "appears" add:
", nor shall it depend on the value, bounds, allocation status, or association status of any <allocate-object> or subobject of an <allocate-object> allocated in the statement."
78:30-31 Additional edit
Change "referenced, defined, or deallocated"
To "referenced or defined"
Add new statement after "ALLOCATE statement."
"Deallocating it causes an error condition in the DEALLOCATE statement."
78:34 Additional edit:
Change "it shall not be allocated"
To "allocating it causes an error condition in the ALLOCATE statement"
79:8+ (Germany Editorial) NO, alternative edit recommended:
[79:11] add "INITIALIZED_TYPE" to end of statement.
[79:16] add "MOD1" to end of statement.
[79:42] add "MAIN" to end of statement.
80:9+ (US Quality) NO, alternative edit is: add:
"A <pointer-object> shall not depend on the value, bounds, or association status of another <pointer-object>, or subobject of another <pointer-object>, in the same NULLIFY statement."

- 80:14+ (US Quality) NO, alternative edit is: add:
"An <allocate-object> shall not depend on the value, bounds, allocation status, or association status of another <allocate-object> or subobject of another <allocate-object> in the same DEALLOCATE statement, nor shall it depend on the value of the <stat-variable> in the same DEALLOCATE statement."
- 80:15 (US Quality) NO, alternative edit is: add:
", nor shall it depend on the value, bounds, allocation status, or association status of an <allocate-object> or subobject of an <allocate-object> in the same DEALLOCATE statement."
- 81:1 (US Editorial) YES.
- 81:12 (Germany Editorial) YES.
- 84-87 yes
- 87:19 yes
- 88:16 yes
- 88:35,37,41 yes
- 89:24 yes
- 90:5 no ("::" not mandatory)
- 90:9 no ("::" not mandatory -- according to straw vote)
- 91:15 yes (from Defect 129 in N1142)
- 91:32+ yes (from Defect 129 in N1142)
- 92:5-6 yes (from Defect 129 in N1142)
- 92:25+ yes (from Defect 129 in N1142)
- 92:29 yes
- 92:31-37 yes
- 93:16-94:39 yes, except last line range should be [94:23-39]
- 93:17 revised edit:
after "statement function," insert " does not have a dummy procedure argument,"
- 93:20 yes
- 93:38 yes (from Defect 129 in N1142)
- 94:15+ yes (from Defect 129 in N1142)
- 93:40-44,94:1 yes
- 94:8 yes
- 94:14 revised edit: Replace line 14 by:
"(8) A reference to any other intrinsic function defined in this standard where each argument is a restricted expression,"
(note that entire list should have been renumbered)
- 94:14(2) revised edit: Move the "or" on line 15 to a separate line below line 15.
- 94:19-20 no (Proposed edit would result in a circular definition.)
- 94:20+ yes (see defect item 175)
- 94:20 yes from Defect 175 in N1142
- 94:28-33 yes
- 95:8-13 yes
- 95:12 yes, but replace "stride" by "strides"
- 95:13 NEW replace "executed ... true." by "conditionally executed."
- 95:37 no not an improvement.

96:16 NEW replace ".GT." by ">"
98:24 no ("::" not mandatory -- according to straw vote)
100-104 yes but no major improvement
103-104 NEW Don't split Table 7.8 onto two pages.
105:31,35 NEW replace ".GE." by ">=" (twice)
106:6 NEW After "are", insert "of", twice
104:20 yes
106:22 yes
106:22 NEW Revert to normal-size font – assumed-size arrays are no longer obsolescent.
106:25 yes
106:26 no Same edit as above.
108:28 no ("::" not mandatory -- according to straw vote)
109:20-21 revised edit: section 7.5.1.6: change note to normative text and change "may" to "shall".
109:24 yes
109:25 NEW add the following as a note (numbered and in a shaded box)
after 109:25 "The rules of defined assignment (12.3.2.1.2), procedure
references (12.4), subroutine references (12.4.3) and elemental
subroutine arguments (12.7.3) ensure that the defined assignment has the
same effect as if the evaluation of all operations in \$x_2\$ and \$x_1\$
occurred before any portion of \$x_1\$ is defined."
110:10 yes
111:3 yes, but in the proposed revision, replace 1st "must be" by "shall
have" and 2nd "must be" by "shall be"
111:19 yes
111:33 yes
111:33 NEW before "pending", insert "the"
111:47 yes
112:29 revised edit: Replace "." by "because SUM is transformational."
113:15 no Straw vote on pointer attribute for loop variables.
113:22 moot See edit below.
113:22-28 yes See also 117:24-28
113:33 yes
113:36+ yes, but, in the edit, (1) replace "should" by "will normally",
(2) indent the body of the FORALL; (3) replace "rank two submatrices" by
"rank-two subarrays"
114:4 no ("::" not mandatory -- according to straw vote) S30a/3
114:7 no ("::" not mandatory -- according to straw vote)
114:8 no ("::" not mandatory -- according to straw vote)
114:24 no ("::" not mandatory -- according to straw vote)
114:32 revised edit: delete "A="

114:44 yes
114:46 yes (see edits below)
114:46-115:5 yes
114:46-115:5(2) yes
114:46-47 NEW Replace "The lower bound... values are" by
"The lower bound, upper bound, and stride are of type integer. Their values, \$m_1\$,

- \$m_2\$, \$m_3\$, are"
(The dollar signs represent italics.)
- 115:2 yes
115:5 NEW end line with "."
115:9 yes
115:10, 12 Put "max" in italics
115:28 yes from S14: Change "Each" to "After all these evaluations have been performed, each".
115:30 NEW Delete extra blank between "the" and "evaluation"
115:30-116:2 yes
116:1 yes from S14: Change "Each" to "After all these evaluations have been performed, each".
116:2 yes
116:11-12 yes, but in the edit, remove "," before "that"
116:17 yes, but in the edit, remove "that"
116:18 Revised edit: replace ", with mask control by any control mask." by "as determined by the outer <forall-constructs>, masked by any control mask corresponding to outer <where-constructs>."
116:19-20 yes
116:23 no ("::" not mandatory -- according to straw vote)
116:29-35 yes
117:6 no ("::" not mandatory -- according to straw vote)
117:13-17 yes
117:24-28 (from 113:22-28) Delete these two constraints
117:27 moot (constraint has been deleted)
118:4 yes
118:4(2) yes (same as previous edit)
118:10 NEW replace ".NE." by "/=" (twice)
118:11 yes
118:19 yes, but, in edit, insert "object or" before "subobject"
118:19-22 yes
118:24 yes
- 119:11. no - FORMAT and DATA are not part of the block.
119:21. yes
120:1. yes
120:37. yes
122:36. yes
122:36-37. no - duplicate.
123:5-12. no - indentation does not add enough clarity to justify the work.
122:37. yes
125:6. yes.
128:6. yes.
129:28-29. yes
132:17. yes.
132:17. no - duplicate

134:7. yes.
137:1. yes
137:3. yes
139:37. yes.
139:37. no - duplicate
143:32+. yes.
143:32+. no - duplicate.
146:13. no - duplicate.
146:13. yes
146:14. no. Pointers should be allowed as DO indices.
146:26. yes
146:38. no - adding "::<" does not enhance clarity.
146:42/43. yes
146:43. no - duplicate
149:25. no - this change is not needed.
150:25. yes
150:28. yes.
151:29-30. yes.
151:29-34. yes.
165:35-43+. no - it is clear enough as is, although some "poetic licence" is being taken. Also, no edits are proposed for the corresponding problem on the next two pages.
166:3. yes.
166:3. no - duplicate
166:5. yes.
166:17. no - duplicate
166:17. no - duplicate
166:17. yes
166:31. Change "form" to "edit descriptor form".
166:32. no - duplicate
166:32. yes.
166:37. yes.
167:3. yes
167:22. Change "form" to "edit descriptor form".
171:5. yes
171:37. yes
172:7. After "an internal file" add "or a preconnected file that has not been opened".
[AFNOR general comment for 318:29]
172:34. yes
175:2. yes
175:3. no. Does not add enough extra clarity.
175:4. no.
178:36. yes
180:4. yes
180:5. no. Does not add enough extra clarity.
180:6. no

- 183:23 Nc Germany Editorial Improvements
(Not redundant: external procedures need not be defined by means of Fortran.)
- 183:30 N Germany Editorial Improvements
- 184:7-9 Y US Quality Improvement
- 184:29 Y John Reid (S14)
[184:29] After module add
"and does not have the ALLOCATABLE or POINTER attribute".
- 184:29 Nc US Quality Improvement
(Only change "be saved" to "have the SAVE attribute")
- 184:31 Nc Germany Editorial Improvements
(Not redundant: external procedures need not be defined by means of Fortran.)
- 184:37 Y US Editorial Improvements
- 185:14 Y US Editorial Improvements
- 185:28-38 Nc US Reason for NO vote (Problem 20)
(A different edit in the spirit of (b) is in S42a.)
- 186:6 Y US Editorial Improvements
- 187:17 Y US Quality Improvement
- 187:19+ Y US Quality Improvement
- 187:30 Y Germany Editorial Improvements
- 189:12 Yc US Quality Improvement
(insert after "operation" on 189:11)
- 191:20 Nc US Quality Improvement
(Solution is in S21.)
- 192:26 Y US Editorial Improvements
- 192:32+ Y John Reid (S14)
[192:32] After definition, add
", except that the interface may specify a procedure that is not pure if the procedure is defined to be pure".
- 192:34 Y US Editorial Improvements
- 193:8 N Germany Editorial Improvements
- 193:9 N Germany Editorial Improvements
- 193:12 N Germany Editorial Improvements
- 193:13 N Germany Editorial Improvements
- 193:14 N Germany Editorial Improvements
- 193:22 Y US Editorial Improvements
- 193:28 Nc Germany Editorial Improvements
("equals sign" is the term defined in 22:6)
- 194:13 Y Germany Editorial Improvements
- 195:13 Y Germany Editorial Improvements
- 195:14 Nc Germany Editorial Improvements
("equals sign" is the term defined in 22:6)
- 195:27 Yc Germany Editorial Improvements
(Also change " END" to "END")
- 195:33 Y US Editorial Improvements
- 195:46 Y Germany Additional Comments
- 196:10 Y US Quality Improvement

196:11 N Germany Editorial Improvements
196:16 Y US Editorial Improvements
196:19 Y Germany Editorial Improvements
196:20-22 Y N1142 defect #083
[196:20-22] Replace the last sentence of 2nd paragraph of 12.3.2.3 with
"In a scoping unit, a name can appear as both the name of a generic
intrinsic procedure in an INTRINSIC statement and as the name of a
generic interface if procedures in the interface and the specific
intrinsic procedures are all functions or all subroutines (14.1.2.3)."
196:32 Y US Editorial Improvements
196:42 Y US Quality Improvement
197:14 Nc US Quality Improvement
(Solution is in S21.)
198:6 N Germany Editorial Improvements
198:9 N Germany Editorial Improvements
198:16 Y US Quality Improvement
199:??-?? Nc N1142, S23 CCI #125
(Waiting for X3J3.)
200:5 N US Quality Improvement
200:14 Y US Editorial Improvements
200:19 Y US Quality Improvement
200:20,22 Y US Editorial Improvements
200:24-27 Y US Quality Improvement
200:32 Y US Quality Improvement
200:37-39 Y US Quality Improvement
200:39 Y
200:45 Y US Quality Improvement
201:37-39 Y N1142 defect #193
[201:37+], add as a new item
"(6) If it is a pointer, it must not be supplied as an actual
argument corresponding to a nonpointer dummy argument other than as the
argument of the PRESENT intrinsic function."

[201:38] change "in (5)"
to "in the list"
201:37-38 Nc US Reason for NO vote (Problem 18)
(Solved by N1142 edit.)
203:26 Y Germany Editorial Improvements
204:31 Y US Quality Improvement
205:32 Y US Editorial Improvements
205:41 Y US Editorial Improvements
206: 1 Y US Editorial Improvements
206:10 Y US Quality Improvement
206:35 Y US Editorial Improvements
206:35-36 Yc US Quality Improvement
(Also add "," after "present")

207:6-8	Yc	Germany	Editorial Improvements
(Add ", DIMENSION(:)" on 207:6 edit)			
207:7	Y	US	Quality Improvement
207:9	N	Germany	Editorial Improvements
207:32	Y	US	Editorial Improvements
207:36	Y	US	Editorial Improvements
207:46	Y	US	Editorial Improvements
208:20-21	Y	US	Quality Improvement
208:34-35	Y	US	Editorial Improvements
208:35	Y	US	Editorial Improvements
208:36	Y	US	Editorial Improvements
208:40	Y	US	Editorial Improvements
208:40-41	Y	US	Editorial Improvements
208:45	Y	US	Editorial Improvements
209: 1	Y	US	Editorial Improvements
209:26	Y	US	Editorial Improvements
209:28	Y	Germany	Additional Comments
209:28	Y	US	Editorial Improvements
209:28	Y	US	Editorial Improvements
209:29	Y	US	Editorial Improvements
209:32	Y	US	Editorial Improvements
210:25	Y	US	Quality Improvement
210:38	Y	US	Editorial Improvements
210:39	Nc	UK	Substantive Comment
(Solution is in S21.)			
210:39	Nc	US	Quality Improvement
(Solution is in S21.)			
210:41	Nc	US	Quality Improvement
(Solution is in S21.)			
210:42	Nc	UK	Substantive Comment
(Solution is in S21.)			
211:1	N	UK	Substantive Comment
211:3	Nc	UK	Substantive Comment
(Note deleted completely, see 211:3-6.)			
211:5-7	Nc	US	Reason for NO vote (Problem 19)
(Different edit at different place, see 215:10, 215:10+, 220:13, 220:13+)			
211:3-6	Y	/interop (MH)	
Delete Note 12.30.			
(Rationale: The "side-effects" stuff is already in Note 12.34.			
Intrinsics are now dealt with in normative text.)			
211:13	Y	US	Quality Improvement
211:24-25	Nc	US	Quality Improvement
(Solution is in S21.)			
212:37	Nc	US	Quality Improvement
(Change "and INTENT(INOUT)" to ", INTENT(INOUT) and pointer".)			
213:5	Y	US	Editorial Improvements

213:7 Y US Editorial Improvements
213:7 Y US Editorial Improvements
213:8 Y US Editorial Improvements

213:11-12 J3 UK Substantive Comment

(This IS a substantive change.

Replace "procedure" by "function" in edit.

Apply edit also to comment 213:27.

Also see merged comments 213:18+ and 213:30.)

[Referred to X3J3 for resolution]

213:11 Y US Editorial Improvements
213:12 Y US Quality Improvement
213:18+ J3 UK Substantive Comment

(New edit provided: add note

"If a specification expression depends only on the attributes of a dummy argument, as in

```
ELEMENTAL FUNCTION F1(C)
  CHARACTER(*) :: C
  CHARACTER(LEN=LEN(C)) :: F1
```

```
...
END FUNCTION F1
```

the corresponding actual argument is not restricted to be scalar.
This restriction applies only when a specification expression depends on the value of a dummy argument, as in

```
ELEMENTAL REAL FUNCTION F2(A,N)
  REAL :: A
  INTEGER :: N
  REAL :: WORKARRAY(N) ! This use of the value of N requires the
                        ! corresponding actual argument to be scalar.
```

```
...
END FUNCTION F2
```

This restriction allows elemental procedures to have internal arrays, etc., whose sizes depend on the value of dummy arguments. However, for any particular execution of an elemental procedure reference, all of the internal arrays must be the same size. This restriction is imposed primarily to facilitate optimization."

)

[Referred to X3J3 for resolution]

213:19 Y US Editorial Improvements
213:26 Y US Editorial Improvements

- 213:27 J3 US Quality Improvement
(Include 213:11-12 edit.)
[Referred to X3J3 for resolution]
- 213:30 J3 US Quality Improvement
(See 213:18+)
[Referred to X3J3 for resolution]
- 215:5 no There are also elemental user-defined functions.
- 215:10 Y /interop
Add "All of the intrinsic functions defined in this standard are pure."
- 215:10+ Y /interop
Add a note "Intrinsic subroutines were used for functionalities involving side effects."
- 215:19 yes
- 216:36 yes (to both edits)
- 216:37 yes
- 216:38 yes (twice)
- 217:1 yes (to both edits)
- 217:21 yes
- 220:6 yes
- 220:10 modified: Replace "have the special definitions given" by "are defined".
- 220:13 Y /interop
Add "The elemental subroutine MVBITS is pure. No other intrinsic subroutine defined in this standard is pure."
- 220:13+ Y /interop
Add a note "As with user-written elemental subroutines, an elemental intrinsic subroutine is pure. The remaining intrinsic subroutines all have side-effects (or reflect system side effects) and thus are not pure."
- 223:22-25 yes
- 226:6 modified: After "procedure" insert "arguments and function".
- 226:7 no See edit below.
- 226:8 NEW After "returned" insert "in a subroutine argument or function result".
- 230:1-2 yes Defect 100 in N1142
- 230:3-5 yes Defect 100 in N1142
- 231:4 no U.S. withdrew item after reconsideration
- 236:14 yes
- 240:23 yes
- 244:36 no U.S. withdrew item after reconsideration
- 247:8 yes
- 247:24 yes
- 249:39 yes
- 250:4 YES (It was originally wrong.)
- 250:38 yes But, in the comment, replace 253:20 by 252:19

250:44 yes
252:25 yes
253:20 yes But, in the comment, replace 253:20 by 252:19
253:26 yes
257:21-22 no see immediately following two NEW edits.
257:21 NEW Replace "type." by "type, and it may be a pointer."
257:22 yes
257:22 NEW Replace "valued." by "valued. It may be a dummy procedure." followed by the US edit 257:22 immediately above.
257:26 yes But, in the comment, replace 253:20 by 252:19
257:32 Do what was proposed in US edit 257:35, but to this line instead.
257:35 no, because it should have been the line number above.
265:30 yes But, in the comment, replace 253:20 by 252:19
265:36 yes
271:18. no
272:7+. no -- see paper S24
273:4. see defect 83 in N1142
273:28+ see defect 83 in N1142
273:33. no
273:36. no
273:38.yes
273:43-45.yes
274:35.yes
275:4+. no
275:5-11. no
275:6. no
275:7.yes
275:9. no
275:10.yes
275:10. no
275:11.yes
275:33-35.yes
275:39.yes
275:45. no
276:27.yes
276:33.yes
276:45.yes
277:15-17.yes
279:2.yes
280:4. no -- add "B" but do not use ::
280:5. no -- add "C" but do not use ::
280:6. no -- add "D" but do not use ::
280:7. no -- add "E" but do not use ::
280:8. no -- add "F" but do not use ::
280:9. no -- add "G" but do not use ::

280:45-46.yes
281:37.yes
284:3. no
284:4. no
284:5. no
284:22. no
285:14-19.yes
289:29+.yes
291:42. no -- instead of suggested edit,
change "(12.7)" to "(2.4.5, 7.5.1.3, 12.7)"
292:7 NEW Change "(4.4.1)" to "(5.1)".
292:32.yes
295:12.yes
295:38-41.yes
299:5. no -- instead of suggested edit,
Change the 2nd "are" (there are 3 on thisline) to "were".

299:8. no -- instead of suggested edit,
change "DO control variables" to "DO variables"; also, in the text of item (1) change "do-variable"
to "DO variable", and change the title of B.1.1 from "DO-Variables" to "DO variables"

299:25+

Add new paragraph: "In this and other annexes, FORTRAN 66 is used as the
informal name for the first International Fortran standard, ISO 1539:1972, which was technically
identical to ANS X3.9-1966."

299:27.yes
299:28. no
299:34-35. no
300:23+.yes
301:12,13.yes
301:26.yes
301:26-27.yes
301:31.yes
302: 2,3.no -- instead of suggested edit,
Change the 2nd and 3rd "are" in this sentence to "were".
302:19.yes
303:9.yes

285:7 (additional UK substantive comment). yes, but in the new text, change the first "and" to
"provided that" and change "program unit" to "scoping unit".

285:8 (additional UK substantive comment). yes.
286:13 (additional UK substantive comment). yes.
286:21 (additional UK substantive comment). yes.
286:23 (additional UK substantive comment). yes.
286:25 (additional UK substantive comment). yes.
286:26 (additional UK substantive comment). yes.

287:42. Change "ultimate" to "direct".
287:48. Change "ultimate" to "direct".
291:33+. yes. [Assigned to X3J3 for further editorial work.]
296:19-20. Italics for "object", "derived type", and "subobject designator".

305:13-14, 27-29, 35, 38, 40-41. no - adding "::" does not enhance clarity
306:3. yes.
306:9-12. no - adding "::" does not enhance clarity
306:32. yes.
307:48. yes
308:27. yes
308:33-34, 37-40, 43-44, 46. no - adding "::" does not enhance clarity
309:7-8, 10. no - adding "::" does not enhance clarity
310:37. yes
313:11-12. yes.
313:12. yes
318:9. no - adding "::" does not enhance clarity
318:29. no edit needed here - edit at 172:7 does it
321:33. no - adding "::" does not enhance clarity
323:4. yes
323:45. yes
324:23, 26. no - adding "::" does not enhance clarity
324:27. yes
324:39-40. no - adding "::" does not enhance clarity
324:41. yes
324:42. yes
325:11. no - adding "::" does not enhance clarity
325:34+. no - intent is not relevant here
325:35, 38. no - adding "::" does not enhance clarity
326+. no - the specific names are reference in the text
326+. no - it is helpful to illustrate both styles
326:27-46. no - indentation does not add enough extra clarity
326:37. yes
326:40. yes
326:43. yes
326:46. yes
327:1-3. no - indentation does not add enough extra clarity
327:3. yes
327:5-51. no - indentation does not add enough extra clarity
327:6. yes
327:15, 17, 32, 34, 42, 48. no - adding "::" does not enhance clarity
328:1-32. no - indentation does not add enough extra clarity
328:5, 6. no - adding "::" does not enhance clarity
328:20. yes
328:22. no - adding "::" does not enhance clarity
329:2. yes

- 329:6, 7. no - adding "::" does not enhance clarity
- 329:8. yes
- 330:31. yes
- 331:26. yes
- 331:39. no - it is helpful to illustrate both styles
- 331:40.yes
- 331:41. no - this is a main program
- 331:46. no - adding "::" does not enhance clarity
- 332:12. no - this is a main program
- 332:22, 26, 41. no - adding "::" does not enhance clarity
- 333:14. yes
- 338:22. no - adding "::" does not enhance clarity
- 343. Add at top "In this index, entries in italics denote BNF terms, entries in bold denote language keywords, and page numbers in bold denote primary or defining text."
- 343:**. add 84
- 343:/. add 161
- 344: boz constant. Delete entry.
- 345: common-block-name. Set in italics.
- 346: default initialization. Set "38" in bold.
- 346:elemental intrinsic. Change "function" to "procedure".
- 346: dummy arguments. Add "197".
- 348: intrinsic. Change "function" to procedure".
- 349:names. Delete entry.
- 350: PARAMETER statement. Delete entry.
- 350: pointer nullification: Change "40" to bold.
- 351: statement label/labels. Merge the two entries.
- 352: statements. Add the entries:
 - FORALL <<112>>
 - MODULE <<184>>
 - MODLE PROCEDURE <<192>>
 - PROGRAM <<183>>
 - SUBROUTINE <<207>>