

Minutes of Meeting 136

X3J3 ANSI Fortran Standards Committee

February 5 - 9, 1996

Las Vegas, Nevada

X3J3 / 96-053

X3J3 ANSI Fortran Standards Committee
Meeting 136 Minutes - Unapproved

X3J3 / 96-053

Craig T. Dedo
March 8, 1996

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Meeting 136 Minutes

by Craig T. Dedo
February 17, 1996

1 Monday, February 5, 1996

A regular meeting was held at 8:30 a.m. on Monday, February 5, 1996 in the Conference Room at the Arizona Charlie's Hotel, 740 S. Decatur Road, Las Vegas, NV 89107. Jerrold Wagener was in the chair and Craig Dedo took the minutes.

1.1 Opening Business

Jerrold Wagener reviewed the e-mail message that he sent out on January 23, 1996 (number x3j3.1996-24) which listed meeting objectives and a proposed organization. There were some late breaking requests from WG5.

1.2 Meeting 136 Objectives and Chair's Report

Discussion Leader: Jerrold Wagener

There are 8 major objectives.

1. Polish and firm up the recommendations on priority items for Fortran 2000 that the JOR subgroup started in paper 95-312r1.
2. Produce a new round of liaison reports for WG5 on the collateral development efforts.
3. Organize interpretation work for Fortran 95. Initially, Richard Bleikamp will work as a committee of one in parallel with other work.
4. Review standing document 95-008 to see if any editorial work needs to be done.
5. Conduct a thorough review of Corrigendum 3 and cross-check it with all of the interpretations that it includes to see that it is accurate. This is in response to a request from John Reid.
6. Make sure that all of the edits made since Meeting 135 in San Diego are in Corrigendum 3 as well.
7. Review the Fortran 95 Committee Draft (CD) in light of remarks from Alla Gorelik (Russia) and David Muxworthy (Britain) received from Miles Ellis on Saturday, February 3.

1.3 Adoption of the Agenda

Discussion Leader: Jerrold Wagener

Presented as mailed with changes proposed by Jerrold Wagener and other members of X3J3 (see Appendix A).

Motion: X3J3 declares this meeting to be a duly called meeting.
Moved: Richard Maine Second: Larry Rolison
Action: Passed by unanimous consent.

Motion: Adopt the agenda with the proposed changes.
Moved: Stan Whitlock Second: Larry Rolison
Action: Passed by unanimous consent.

1.4 Approval of the Meeting 135 Minutes

Discussion Leader: Craig Dedo

Reference: 96-314, Meeting 135 Minutes

There were 3 corrections.

Motion: Approve the minutes as amended.
Moved: Stan Whitlock Second: Walt Brainerd
Action: Passed by unanimous consent.

1.5 Meeting 135 Action Items

Discussion Leader: Craig Dedo

1. Kurt Hirschert Motivate the system operators at the NCSA to get the auto-unzip feature on the X3J3 server to work. Result: He talked to the system operators several times but they still have not fixed the problem.
Status: Closed.
2. Craig Dedo Prepare a revised copy of the Meeting 134 minutes and send out to the members. Result: This was prepared and put on the X3J3 server as document 95-249r1. He sent paper copies to Mallory North and Larry Rolison.
Status: Closed.
3. Craig Dedo Prepare a printed copy of the US TAG minutes for the August 1995 meetings as soon as possible. Result: Still not done.
Status: Continuing.
4. Jeanne Martin Check to see if she has a copy of the list of publications that Ivor Philips used to send press releases to. Yes, she has the list and sent it to the X3J3 Mailing List.
Status: Closed.
5. Jerrold Wagener Check the SD-10 to see whether all of the information listed in section III.c of the X3J3 Annual Report to X3 is actually required.
Status: Continuing.
6. Walt Brainerd Communicate with William Clodius and clarify his intent in paper 95-300. Result: He did this and also communicated with Janice Shepherd about this matter. He sent the results to Stan Whitlock for inclusion in the JOR.
Status: Closed.
7. Craig Dedo Send a copy of the X3J3 Meeting 135 Minutes to those persons who want to review them before sending them to the X3J3 Mailing List or including them in the post-meeting mailing.
Status: Closed.

1.6 X3/OMC Report

Discussion Leader: Jerrold Wagener

Reference: (None)

X3 has appointed Dick Hendrickson as the International Representative. He will be our principal contact with our international colleagues and will chair the US TAG meetings.

There has been some action with respect to the Language Independent Arithmetic (LIA) standard. LIA-1, Integer and Floating Point Arithmetic, has been ratified as an ISO standard. LIA-2, Elementary and Numerical Functions, is in the draft stage right now. One copy of each part of LIA is on the table for people to look at.

1.7 ISO/WG5 Report

Discussion Leader: Jerrold Wagener

Reference: (None)

There was nothing to report at this time.

1.8 Treasurer's Report

Discussion Leader: Mallory North

Reference: 95-313r1, Treasurer's Report for Meeting 135

1.9 Membership Report

Discussion Leader: Larry Rolison

- Memberships terminated as of the close of Meeting 135:
 - Jose Oglesby (Microsoft)
 - James Himer (Exxon)
- Convex was bought out by Hewlett-Packard, effective December 20, 1995. It will no longer have an independent seat on X3J3.

Membership Changes:

- Richard Bleikamp is now an alternate to David Levine of Hewlett-Packard.
- Jeanne Martin is now an alternate to Brian Smith of the University of New Mexico.
- John Cuthbertson is now a representative from Edinburgh Portable Compilers, replacing Geoff Millard as the alternate to Graham Barber.
- Loren Meissner, retired Professor of Computer Science from the University of San Francisco and former member of X3J3, declared this meeting to be his observer meeting, with the intent of joining the committee. He will represent himself.
- R. Baker Kearfott, Professor of Mathematics at the University of Southwestern Louisiana (USL), declared this to be his observer meeting, with the intent of joining the committee. Right now, it is indeterminate whether he will represent himself or USL.
- David Levine (Hewlett-Packard) and Henry Zongaro (IBM) cannot attend this meeting, saying that they are badly needed back at their respective offices.

Memberships Lost:

James Himer (Exxon)
Jose Oglesby (Microsoft)
Convex
Jeanne Martin (Livermore National Laboratory)

Current Membership: 18
Quorum: 6
One over half: 10

Members in Danger of Losing Membership:

David Levine (Hewlett-Packard)

Non-voting Alternates:

Jeanne Adams (National Center for Atmospheric Research)

Visitors:

Loren Meissner (Retired Professor of Computer Science)
R. Baker Kearfott (Professor of Mathematics, University of Southwestern Louisiana)

1.10 Comments from Members

Jerrold Wagener The trade magazine *Computer Standards & Interfaces* will be publishing a special issue on Fortran in a few months. It will have 12 separate papers in it.

1.11 Local Arrangements

Discussion Leader: Jerrold Wagener

There are no events or parties scheduled for this meeting. Richard Maine brought from NASA a Hewlett-Packard 4Si/MX laser printer, which prints double-sided at 17 pages per minute. He also brought a low power 80286 computer with Microsoft Windows 3.1 on it.

1.12 Subgroup Assignments

Discussion Leader: Jerrold Wagener

Reference: (None)

Edit - Richard Maine

Finish the edits to the Fortran 95 draft.

Interpretations - Richard Bleikamp

Start up interpretation work for Fortran 95 and carry over undecided interpretations from Fortran 90.

JOR - Jeanne Adams, Richard Bleikamp, Craig Dedo, Larry Rolison, Stan Whitlock

Refine the list of priorities for Fortran 2000 given in paper 95-312r1.

Check the Corrigendum 3 for any discrepancies between it and the included interpretations as passed by X3J3 and WG5.

Asynchronous I/O (95-312r1 Item B2). Richard Bleikamp may have developed a proposal. There also are some ideas in papers 95-271 and 96-033.

Command Line Arguments (95-312r1 Item B3). There may be a paper by Carol Munroe of Thinking Machines.

OOF - David Epstein, Kurt Hirschert, Jeanne Martin, Loren Meissner, Richard Maine

Liaison Report on Parameterized Derived Types and Conditional Compilation.

Edits for Fortran 95 and Corrigendum 3.

Technical notes from Miles Ellis on elemental procedures and arguments.

Derived type I/O (95-312r1 Item A1).

Pointers to Procedures (95-312r1 Item B1).

Object Oriented Fortran (95-312r1 Item C1). Jerrold Wagener and Loren Meissner brought published papers on Object Oriented Extensions to Pascal, COBOL, and Ada.

Parallel - Keith Bierman, Walt Brainerd, John Cuthbertson, Dick Hendrickson

Liaison Reports for Floating Point Exceptions, Interoperability, and Allocatable components of Derived Types (papers 95-293r1, 95-307r2, and 95-308r1).

Condition Handling for Fortran 2000 (95-312r1 Item A2). Most likely, this will be a revision of John Reid's ENABLE proposal from 1994.

Specifying Default Precision (95-312r1 Item B4).

Action Item by Jeanne Adams: Take the time to discuss the status of Interpretations 27 and 100 in light of the recent e-mail with Richard Bleikamp.

1.13 Conditional Compilation (CoCo) Presentation

Discussion Leader: David Epstein

Reference: 96-027, What is a CoCo Module?

96-031, Straw CoCo Definition

Scribe notes not available; no scribe was appointed for the discussion.

Recess for subgroups at 12:10 p.m.

1.14 Review of Upcoming Business

Call to order at 4:05 p.m.

JOR

- JOR is comparing the contents of Corrigendum 3 with the individual interpretations. There should be a report by Tuesday afternoon.
- JOR will be starting work on Asynchronous I/O as soon as Richard Bleikamp arrives. This proposal relates to items 79 and 80 in the JOR.
- There may or may not be any work on Command Line Arguments. Variations in this feature are mentioned in JOR items 16, 40, and 41. One possibility is to point to the POSIX Binding.
- JOR would like to reserve some agenda time on Thursday morning for discussion of which JOR items should be put into Fortran 2000.

Parallel

- Parallel is looking at Michael Hennecke's TR on Interoperability with C. It looks like this TR will have to cover every major functionality in order to be really useful. One of the major objectives of this TR is to enable Fortran programmers to have full access to Graphical User Interfaces (GUIs). In order to do this, an Interoperability feature will have to do all sorts of things; C language system routines tend to make use of all sorts of weird C language constructs and put such constructs in the public interfaces.
- We need to communicate to Michael Hennecke that the current scope is not big enough to solve the interface problem; we need to map to all of the C language data types.
- Right now, Parallel has no plan for action on Condition Handling and Specifying Default Precision.

OOF

- OOF looked at all of the topics assigned to it but has nothing to bring forward to full committee at this time.
- OOF is working on the liaison reports on Parameterized Derived Types and Conditional Compilation but has not reached any conclusions yet.
- OOF has not done any work yet on Derived Type I/O and Pointers to Procedures.

Recess at 4:35 p.m.

2 Tuesday, February 6, 1996

Call to order at 8:30 a.m.

None of the subgroups have anything more to report.

All of the responses to the persons who commented on the Fortran 95 CD got sent out.

There is a paper, 96-036, on Command Line Arguments, from Carol Munroe.

Recess for subgroups.

2.1 Subgroup Reports and Processing

Call to order at 3:05 p.m.

Jerrold Wagener reported that so far he has not gotten any response yet from Michael Hannah of Sandia Laboratories, on POSIX interfaces to Fortran.

The High Performance Fortran Forum (HPFF) would like to make their documents available on our ftp server. Richard Maine and Kurt Hirchert will take care of these items.

HPFF is interested in turning HPF into an ISO Technical Report (TR).

JOR

- Paper 96-040, Asynchronous I/O: Subgroup Considerations / Assumptions / Straw Votes, is on the table. JOR would like to hold a series of straw votes on Wednesday morning.
- We would like to produce a document that will go to WG5 saying what we want in Fortran 2000. Members should read the JOR and think about what direction they would like Fortran 2000 to take.

Parallel

- Paper 96-039, Liaison Report on Interoperability with C, is on the table.
- Paper 96-041 is the latest version of John Reid's Exceptions Technical Report. There are three items that he wanted advice on.

OOF

- Paper 96-037 is the answer to John Reid's request for a review of the Fortran 95 Draft.
- Paper 96-038 is the response from the F95 Editor to the editorial comments received from Miles Ellis

as a result of his request for comments on the F95 draft.

- There will be a paper to respond to UK Substantive Point 5. There may be a prospective change to the technical content of Fortran 95 in order to respond to this concern.

2.2 US TAG Meeting

Recess at 3:25 p.m. for US TAG meeting.

3 Wednesday, February 7, 1996

Call to order at 8:30 a.m.

3.1 Future Meetings

Discussion Leader: Mallory North

Mallory has checked around for future meeting places. One candidate is the Melrose Suites in Las Vegas, NV. He will be checking into other places and will report back on Thursday morning.

3.2 Presentation on Asynchronous I/O

Discussion Leader: Richard Bleikamp

Reference: 96-040, Asynchronous I/O: Subgroup Considerations / Assumptions / Straw Votes

Scribe notes unavailable; no scribe was appointed for the discussion.

Straw Vote: What syntax should we use for this feature?

- 13 Extend the Fortran I/O statements
- 0 New syntax, e.g. BUFFERIN / BUFFEROUT
- 0 Undecided

Straw Vote: How should the user select the asynchronous I/O capability?

- 14 At the time the OPEN statement is executed
- 0 On each READ or WRITE statement
- 0 Undecided

Straw Vote: How many I/O requests should be pending at a time?

- 0 Only one per unit
- 6 Many per unit without any ID specifier for each I/O operation
- 6 Many per unit with individual ID specifiers for each I/O operation
- 0 One per program
- 2 Undecided

Straw Vote: Should there be support for formatted I/O?

- 5 Support only unformatted I/O
- 4 Include support for formatted I/O
- 5 Undecided

Straw Vote: Should there be support for direct access I/O?

- 8 Yes
- 0 No
- 6 Undecided

Straw Vote: Should the feature require the use of contiguous memory in the I/O list?

- 4 Always require the I/O list to represent contiguous memory
- 5 User-specifiable whether the I/O list represents contiguous memory
- 3 Always allow any I/O list (i.e., non-contiguous memory allowed always)
- 2 Undecided

Straw Vote: Should the end of asynchronous I/O be determined by a separate statement or a volatile variable?

- 13 Separate statement (e.g., WAIT statement)
- 0 VOLATILE variable
- 1 Undecided

Straw Vote: Should this feature support non-advancing I/O?

- 2 Support non-advancing I/O
- 9 Only permit advancing I/O
- 3 Undecided

Recess.

3.3 Subgroup Reports and Processing

OOF

Motion: Approve 96-037, Suggested Minor Edits to Corrigendum 3
Moved: Craig Dedo Second: Larry Rolison
Action: Passed by unanimous consent

Richard Maine presented paper 96-038, Response to Editorial Comments, for informational purposes only.

Motion: Approve 96-039, Liaison Report on C Interoperability TR
Moved: Dick Hendrickson Second: Keith Bierman
Action: Passed on a counted vote by show of hands Vote: Yes - 10 No - 1

Straw Vote: Should IEEE_TEST_FLAG be a function or subroutine?
6 Function 9 Subroutine 0 Undecided

Motion: Create IEEE_TEST_FLAG as a subroutine
Moved: Keith Bierman Second: Craig Dedo
Action: Passed on a counted vote by show of hands Vote: Yes - 9 No - 3

Recess for subgroups at 11:55 a.m.

3.4 Subgroup Reports and Processing

Call to order at 4:30 p.m.

JOR

- Paper 96-040r1, Async I/O: Requirements for F2000, is available.
- There will be a discussion on Thursday on more JOR items. Items B1 thru B8 in papers 95-264 and 95-265 are already accepted by WG5. Items B9 thru B24 did not make the first weighted cut at the WG5 meeting in San Diego.

Parallel

- Papers 96-043 and 96-045 are available.

OOF

- OOF spent a lot of time doing some creative thinking about what object oriented programming (OOP) really is, why OOP is necessary or desirable, what features of OOP are the most important for future Fortran standards, and how OOP features might be included in future Fortran standards.

3.5 Future Meeting Dates and Locations

Discussion Leader: Mallory North

Mallory North did some further checking into possible locations for future meetings. The Melrose Suites has another location called the Sunrise Suites. It is much more flexible on rates. The conference room is much less expensive than at Arizona Charlie's. If we can buy at least 20 hotel rooms, then the conference room will be free.

Motion: Authorize Mallory North to enter into contracts to reserve the conference room at the Sunrise Suites Hotel in Las Vegas, NV for the next 4 meetings to be held on the following dates:
May 13-17, 1996
August 12-16, 1996

November 11-15, 1996

February 10-14, 1996

Moved: Keith Bierman

Second: Craig Dedo

Action: Passed by unanimous consent.

Recess at 5:10 p.m.

4 Thursday, February 8, 1996

Call to order at 8:30 a.m.

4.1 Requirements for Fortran 2000

JOR

Discussion Leader: Stan Whitlock

References: 96-004, X3J3 Journal of Requirements (JOR)
96-042, Five Proposed JOR Items
96-044r1, Three Proposed JOR Items
96-046, Proposed JOR Item on Generic Pointers

The following items, submitted at this meeting, have been incorporated into the JOR and given the following JOR item numbers.

<u>Item #</u>	<u>Item Description</u>
86	Stream I/O
87	VOLATILE Statement and Attribute
88	Allow User to Define Precedence of User-defined Operators
89	Generic Pointers
90	Optional START Statement
91	Extend MAX, MIN, and Related Intrinsics to CHARACTER Variables
92	LEN=* for Initialization of CHARACTER Variables
93	Extend Non-Advancing I/O to List-Directed I/O
94	Extend Initialization of COMPLEX Variables

Motion: Add the following JOR items to the list of recommendations to WG5.

Moved: Stan Whitlock Second: Craig Dedo

Action: The following table presents the votes on each item and the resulting decision. All votes were taken by a counted vote by show of hands.

<u>Item #</u>	<u>Y</u>	<u>N</u>	<u>Result</u>	<u>JOR Item Title</u>
3	8	3	Pass	Array Components of Array Structures
17	7	6	Pass	BIT Data Type, String
18	10	3	Pass	Controlling POINTER Bounds
31	3	10	Fail	Varying Length CHARACTER with Declared Maximum
34	7	5	Pass	Specifying Default Precisions
44	9	2	Pass	Unsigned INTEGER Data Type
58	13	0	Pass	Regularize Handling of POINTER Arguments

Item #	Y	N	Result	JOR Item Title
60	11	2	Pass	Pointer Association Classes
66	8	3	Pass	Generic COUNT_RATE Argument for SYSTEM_CLOCK
75	12	1	Pass	Remove Limitation on Statement Length
77	6	7	Fail	Processor Dependent Features List
86	13	1	Pass	Stream I/O

Straw Votes on JOR Item 87, VOLATILE Statement and Attribute:

1st Straw Vote: Do you like this feature?

3 Yes 4 No 3 Undecided

2nd Straw Vote: Do you like this feature?

4 Yes 6 No 4 Undecided

Motion: Archive JOR Item 87, VOLATILE Statement and Attribute

Moved: Keith Bierman Second: Tom Lahey

Action: Failed on a counted vote by show of hands. Vote: Yes - 6 No - 8

Recess.

Quorum present.

Parliamentary Inquiry by Tom Lahey: If a feature is not approved as a requirement at this point, is OOF precluded from including the feature as a part of OOF?

Answer by Jerrold Wagener: Yes.

Motion: Take straw votes and actual votes on adding the latest JOR items to the list of recommendations to WG5.

Moved: Stan Whitlock Second: Craig Dedo

Action: The following table presents the votes on each item and the resulting decision. All votes were taken by a counted vote by show of hands.

Item #	Straw Vote			Actual Vote		Result	JOR Item Title
	Y	N	U	Y	N		
88	8	3	2	9	5	Pass	Allow User to Define Precedence of User-defined Operators
89	9	2	2	10	4	Pass	Generic Pointers
90	4	8	4	0	12	Fail	Optional START Statement
91	8	2	6	12	2	Pass	Extend MAX, MIN, and Related Intrinsics to CHARACTER Variables
92	4	7	4	2	11	Fail	LEN=* for Initialization of CHARACTER Variables
93	8	1	6	7	3	Pass	Extend Non-Advancing I/O to List-Directed I/O
94	12	0	1	13	0	Pass	Extend Initialization of COMPLEX Variables

4.2 Tutorial on Interval Arithmetic

Discussion Leader: Professor R. Baker Kearfott

References: 96-028, Interval Arithmetic in Fortran - Some Specifics

96-029, Supplementary Notes - Interval Arithmetic in Fortran

Scribe notes not available; no scribe was appointed for the discussion. Prof. Kearfott will write up a proposal summarizing the discussion and present it at Meeting 137.

Recess for subgroups.

4.3 TR Liaison Reports

Call to order at 4:05 p.m.

Motion: Approve 96-043, Floating Point Exception Handling Liaison Report
Moved: Keith Bierman Second: Craig Dedo
Action: Passed, as amended, by unanimous consent.

Motion: Approve 96-045, Liaison Report on Allocatable Components TR
Moved: Dick Hendrickson Second: Keith Bierman

Straw Vote: Do we like the functionality of allowing an assignment statement to deallocate and reallocate a component variable?

8 Yes 2 No 6 Undecided

Straw Vote: Do we like using the pointer assignment operator, =>, as the syntax for this kind of functionality?

1 Like using the => operator
11 Would prefer using something else
4 Undecided

Action: Withdrawn. A revised report will appear Friday.

Action Item: Jerrold Wagener should send a generic note to Miles Ellis saying that papers for anything that progresses to the next level of WG5 processing should be available to X3J3 and/or WG5 members at least two weeks before a meeting.

Motion: Approve 96-047, Liaison Report on Parameterized Derived Types
Moved: Kurt Hirschert Second: Richard Maine
Action: Passed on a counted vote by show of hands Vote: Yes - 10 No - 1

Motion: Approve 96-048r1, Liaison Report on Conditional Compilation
Moved: Kurt Hirschert Second: Richard Maine
Amendment: Add a reference to paper 95-275 in the first sentence
Moved: Keith Bierman Second: Kurt Hirschert
Action on Amendment: Passed by unanimous consent
Action on Main Motion as Amended: Passed by unanimous consent

4.4 Subgroup Reports

JOR

Motion: Approve 96-040r1, Async I/O: Requirements for F2000
Moved: Keith Bierman Second: Richard Bleikamp
Action: Passed by unanimous consent

4.5 US TAG Meeting

Recess at 5:15 p.m. for US TAG meeting.

5 Friday, February 9, 1996

Call to order at 8:30 a.m.

5.1 Subgroup Reports

Parliamentary Inquiry by Jeanne Adams: Is it possible to move to reconsider the letter ballot vote on Interpretations 27 and 100?

Answer by Craig Dedo: He discussed this issue with Jerrold Wagener on Wednesday night. According to Jerry, the special WG5 processing rules in effect during the ratification process for Fortran 95 removed the interpretation ballot items from our control as soon as the letter ballot was completed. Since a motion to reconsider is in order only if the target of the reconsideration is still within the control of the committee, the interpretations cannot be reconsidered.

Parliamentary Inquiry by Jeanne Adams: What are our options with respect to Interpretations 27 and 100 and what are the practical effects of each option?

Answer by Jerrold Wagener:

1. We could appeal to WG5 to reconsider the interpretations. If WG5 agrees to reconsider these interpretations, this would delay Fortran 95 until there is an interpretation on which two thirds of the voting members could agree. Such a reconsideration would delay Fortran 95 for at least a year.
2. We could process them as Fortran 95 interpretations. Doing this would not delay Fortran 95. It could create an incompatibility between Fortran 90 and Fortran 95.

Motion: Approve 96-045r1, Liaison Report on Allocatable Components TR

Moved: Dick Hendrickson Second: Stan Whitlock

Action: Passed by unanimous consent

Motion: Approve 96-050, Resolution of the UK Substantive Issue 5, as a recommendation to the Fortran 95 Editor and the Convenor of WG5

Moved: Kurt Hirschert Second: Jeanne Martin

Action: Passed by unanimous consent

5.2 Fortran 2000 Development Plan and Schedule

Discussion Leader: Jerrold Wagener

Jerrold Wagener presented an informal, rough cut Gantt Chart that he had created on a spreadsheet. The chart showed the various features for Fortran 2000, space for the sponsor of each feature, and each meeting date from May 1996 through February 1999. With the resources that we have, how do we schedule the work so that as many features as possible are completed in a timely manner?

Jerrold Wagener asked for input from the committee so that the rough cut chart could be refined into a realistic planning document later. There was plenty of discussion by committee members. Scribe notes unavailable; no scribe was appointed for the discussion.

Action Item: Loren Meissner will prepare a paper on whether further technical development work should be done on non-advancing I/O.

Recess.

Parliamentary Inquiry: What are the deadlines for the May meeting?

Answer by Craig Dedo:

April 5, 1996 Any kind of paper documents. Electronic documents other than those in commonly available word processing document formats. These would include such things as graphic image formats, charts, graphs, etc.

April 26, 1996 Electronic documents *if* they are in plain ASCII text or commonly available word processing document formats

5.3 Future Meetings

See also Appendix C.

Discussion Leader: Mallory North

The next four meetings will be held at the Sunrise Suites hotel in Las Vegas, NV. Mallory North gave out the hotel phone numbers, reservation deadlines, and other pertinent information.

5.4 Review of Meeting 136 Action Items

Discussion Leader: Craig Dedo

Motion: Release Craig Dedo from any further obligations under Action Item 1.
Moved: Dick Hendrickson Second: Kurt Hirschert
Action: Passed by unanimous consent

Secretary's note: The first 5 action items in the list below were created prior to or during the meeting. The remainder were created during the review of list of action items.

1. Craig Dedo Prepare a revised copy of the Meeting 134 US TAG minutes for the August 1995 meetings as soon as possible.
Status: Closed by motion immediately above
2. Jerrold Wagener Check the SD-10 to see whether all of the information listed in section III.c of the X3J3 Annual Report to X3 is actually required.
Status: Continuing
3. Jerrold Wagener Reserve meeting time to discuss the status of Interpretations 27 and 100 in light of the recent e-mail with Richard Bleikamp.
Status: New
4. Jerrold Wagener Send a generic note to Miles Ellis saying that papers for anything that progresses to the next level of WG5 processing should be available to X3J3 and/or WG5 members at least two weeks before a meeting.
Status: New
5. Loren Meissner Prepare a paper on whether further technical development work should be done on non-advancing I/O.
Status: New
6. Stan Whitlock Send the specifications on Asynchronous I/O to WG5 and HPFF.
Status: New
7. Stan Whitlock Send the Corrigendum 3 typographical corrections to John Reid.
Status: New
8. Richard Maine Send the new Corrigendum 3 items to John Reid.
Status: New
9. Dick Hendrickson Send the Liaison Reports on the Interoperability with C and Allocatable Components TRs to the WG5 reflector.
Status: New
10. Keith Bierman Send the Liaison Report on the Floating Point Exception Handling TR to the WG5 reflector.
Status: New
11. Kurt Hirschert Send the Liaison Reports on the Parameterized Derived Types and Conditional Compilation development efforts to the WG5 reflector.
Status: New
12. Mallory North Place electronic copies of the post-meeting documents onto the X3J3 server in the /incoming directory.
Status: New
13. Stan Whitlock Issue an updated version of the JOR with all of the new items included.
Status: New

14. Kurt Hirchert Bring electronic copies of the standing documents to Meeting 137.
 Richard Maine Status: New
15. Walt Brainerd Manage the FIDS preparation and snacks for Meeting 137.
 Status: New

5.5 Membership Report

Discussion Leader: Larry Rolison

Total Membership: 18
Present or Represented: 16
One Over Half: 10
Quorum: 6
Jeopardy: 2
Prospective Members: 2

Memberships Lost: None

Members in Danger of Losing Membership:

 David Levine (Hewlett-Packard)
 Brian Smith (University of New Mexico)

Prospective Members (Observer meeting):

 R. Baker Kearfott (University of Southwestern Louisiana)
 Loren Meissner (Retired)

5.6 Treasurer's Report

Discussion Leader: Mallory North

Reference: 96-052, Meeting 136 Treasurer's Report

5.7 Meeting 137 Agenda

Discussion Leader: Larry Rolison

The Vice Chair solicited ideas for the agenda for the next meeting. Following are ideas that were mentioned.

- Papers that were ignored or for various reasons did not receive any action at this meeting.
- Reserve time on Tuesday morning for discussion of JOR items.
- Reserve some time at the meeting for discussion of the Conditional Compilation feature.
- Reserve time on Monday afternoon for subgroup time.
- Reserve time for two US TAG meetings during the week.
- Tutorial on possible syntax for Asynchronous I/O.
- Tutorial on "What is OOF?"
- Progress report on OOF.
- Interpretation processing.

5.8 Comments from Members

There were no comments from members.

The meeting adjourned at 11:55 a.m.

Appendix A
Agenda for X3J3 Meeting 136
(as Originally Proposed)

Monday, February 5, 1996

8:30	Opening Business	J. Wagener
	Meeting objectives and Chair's report	J. Wagener
	Membership Report / Introductions	L. Rolison
	Adopting Agenda	J. Wagener
	Approving Meeting 13n Minutes	C. Dedo
	Review Meeting 13n Action Items	C. Dedo
	Treasurer's Report	M. North
	X3/OMC report	J. Wagener
	ISO/WG5 report	K. Hirschert
	Comments from members	
	Local Arrangements	
	Subgroup Head reports / goals for meeting	Subgroup heads
12:00	Lunch	
1:30	Subgroup meetings	

Tuesday, February 6, 1996

8:30	Subgroup reports and processing	Subgroup heads
12:00	Lunch	
1:30	Subgroup Meetings	

Wednesday, February 7, 1996

8:30	Subgroup report and processing	J. Shepherd
	Subgroup Meetings	
12:00	Lunch	
1:30	Subgroup Meetings	

Thursday, February 8, 1996

8:30	Subgroup reports and processing	Subgroup heads
	Subgroup Meetings	
12:00	Lunch	
1:30	Subgroup Meetings	
4:30	U.S. TAG	

Friday, February 9, 1996

8:30	Subgroup reports and processing	Subgroup heads
12:00	Lunch	
1:30	Subgroup Reports and Processing	Subgroup heads
3:30	Closing Business	J. Wagener
	Membership Report	L. Rolison
	Future Meetings	L. Rolison
	Treasurer's Report	M. North
	Next Meeting Agenda	L. Rolison
	Review of Action Items	C. Dedo
	Comments from Members	
5:00	Adjournment	

Agenda for X3J3 Meeting 135
(as Adopted)

1. Monday, February 5, 1996 8:30 am
 - 1.1 Opening business J. Wagener
 - 1.2 Meeting objectives and Chair's report J. Wagener
 - 1.3 Adoption of agenda
 - 1.4 Approval of Meeting 135 minutes C. Dedo
 - 1.5 Review Meeting 135 action items C. Dedo
 - 1.6 X3/OMC report (if any) J. Wagener
 - 1.7 ISO/WG5 Report J. Wagener/D. Hendrickson
 - 1.8 Treasurer's report M. North
 - 1.9 Beginning membership report L. Rolison
 - 1.10 Comments from members
 - 1.11 Local arrangements J. Wagener
 - 1.12 Subgroup assignments J. Wagener
 - 1.13 Conditional compilation presentation D. Epstein
 - 1.14 Subgroup meetings
 - 1.14 Subgroup reports (4:00 pm) Subgroup heads
2. Tuesday, February 6, 1996 8:30 am
 - Subgroup meetings
 - 2.1 Subgroup reports and processing (3:00pm) Subgroup heads
 - 2.2 TAG meeting (3:30 pm) J. Wagener/D. Hendrickson
3. Wednesday, February 7, 1996 8:30 am
 - 3.1 Future meetings M. North
 - 3.2 Presentation on Asynchronous I/O R. Bleikamp
 - 3.3 Subgroup reports and processing Subgroup heads
 - Subgroup meetings
 - 3.4 Subgroup reports (4:30 pm) Subgroup heads
 - 3.5 Future meeting dates and locations M. North
4. Thursday, February 8, 1996 8:30 am
 - 4.1 Requirements for Fortran 2000 S. Whitlock
 - 4.2 Interval arithmetic presentation/discussion B. Kearfott
 - Subgroup meetings
 - 4.3 TR liaison reports Liaisons
 - 4.4 Subgroup reports (3:00 pm) Subgroup heads
 - 4.5 TAG meeting (5:00 pm) D. Hendrickson
5. Friday, February 9, 1996 8:30 am
 - 5.1 Subgroup reports Subgroup heads
 - 5.2 Fortran 2000 Development Plan and Schedule J. Wagener
 - 5.3 Future meetings M. North
 - 5.4 Review of action items C. Dedo
 - 5.5 Closing membership report L. Rolison
 - 5.6 Treasurer's report M. North
 - 5.7 Next meeting agenda L. Rolison
 - 5.8 Comments from members
 - Adjournment

Appendix B
X3J3 Register of Documents for 1996

Standing Documents

<u>Paper Number</u>	<u>Title</u>
X3J3/96-000	Register of Documents
X3J3/96-001	Membership List
X3J3/96-002	(Unused)
X3J3/96-003	X3J3 Member References
X3J3/96-004	Journal of Development
X3J3/96-005r1	X3J3 Resolutions and Responses to WG5 Resolutions
X3J3/96-006	Defect Report
X3J3/96-007	Draft Revision to Fortran 95
X3J3/96-008	Editorial Considerations for 9X Draft Revision
X3J3/96-009	Technical Proposals for Future Revisions
X3J3/96-010	(Unused)

1996 Papers

<u>Paper Number</u>	<u>Submitter</u>	<u>Date</u>	<u>Title</u>
X3J3/96-021	Shepherd	951127	006 Post-Meeting 135 Letter Ballot
X3J3/96-022	Maine	951130	Edits Incorporated in X3J3/95-007r2
X3J3/96-023	Dedo	960110	Interpretation 202, Evaluation of Intrinsic Procedures
X3J3/96-024	Shepherd	960109	Results of the Post Meeting 135 006 Letter Ballot
X3J3/96-025	Shepherd	960119	RFI on EXTERNAL submitted by M. Hennecke
X3J3/96-026	Shepherd	960119	96-006 Status
X3J3/96-027	Epstein	960119	What is a CoCo Module?
X3J3/96-028	Kearfott	960123	Interval Arithmetic in Fortran - Some Specifics
X3J3/96-029	Kearfott	960123	Supplementary Notes - Interval Arithmetic in Fortran
X3J3/96-030	Maine	960129	Edits made to X3J3/95-007r2
X3J3/96-031	Epstein	960205	CoCo Straw Definition
X3J3/96-032	Rolison	960205	Informal National Letter Ballot on WG5 N1166
X3J3/96-033	Martin	960205	Proposal to Add Asynchronous Input/Output (114-JTM-6, 11/20/89)
X3J3/96-034	Reid	960205	UK Substantive Point 5
X3J3/96-035	Epstein	960205	CoCo Straw 2
X3J3/96-036	Munroe	960206	Questions About Command Line Arguments in Fortran 2000
X3J3/96-037	Maine	960206	Suggested Minor Edits to Corregendum 3
X3J3/96-038	Maine	960206	Response to Editorial Comments on N1166
X3J3/96-039r1	Hendrickson	960206	Liaison Report on C Interoperability TR
X3J3/96-040r1	/JOR	960206	Asynchronous I/O: Requirements for F2000
X3J3/96-041	Reid	960206	(SC22WG5.1031) Exceptions Technical Report
X3J3/96-042	Meissner	960207	Five Proposed JOR Items
X3J3/96-043r1	Bierman	960207	Floating Point Exception Handling Liaison Report
X3J3/96-044r1	Bierman	960207	Three Proposed JOR Items
X3J3/96-045r1	/Parallel	960207	Liaison Report on Allocatable Components TR
X3J3/96-046	/JOR	960207	Proposed JOR Item on Generic Pointers
X3J3/96-047	/OOF	960208	Liaison Report on Parameterized Derived Types
X3J3/96-048r2	/OOF	960208	Liaison Report on Conditional Compilation
X3J3/96-049	Dedo	960208	Four JOR Items
X3J3/96-050	/OOF	960208	Resolution of UK Substantive Point 5
X3J3/96-051	Dedo	960208	Lower Case and Mixed Case Syntax Elements
X3J3/96-052	North	960222	Meeting 136 Treasurer's Report
X3J3/96-053	Dedo	960217	Meeting 136 Minutes

Appendix C
Future Meetings and Distribution Assignments

Meeting conventions

- 4 meetings per year
- attempt to schedule second full week of month
- attempt to schedule meetings back to back with WG5 meetings

Future Meeting Schedule

- 137 May 13-17, 1996 - Las Vegas, NV
Pre-meeting distribution deadline: April 8
Pre-meeting distribution: Zongaro, IBM
Post-meeting distribution: Smith, UMN
- 138 August 12-16, 1996 - Las Vegas, NV
Pre-meeting distribution deadline: July 8
Pre-meeting distribution: Terpstra, Princeton
Post-meeting distribution: Wagener, self
- 139 November 11-15, 1996 - Las Vegas, NV
Pre-meeting distribution deadline: October 7
Pre-meeting distribution: Warnock, LANL
Post-meeting distribution: Whitlock, DEC
- 140 February 10-14, 1997 - Las Vegas, NV
Pre-meeting distribution deadline: January 6
Pre-meeting distribution: Bierman, Sun
Post-meeting distribution: Hirschert, U of Ill.

Excused: Brainerd, Dedo, Epstein, Hendrickson, Martin

List for Distribution Recipients

Agenda and meeting notice sent to:

- Principals
- Alternates
- Observers, consultants, liaisons
- WG5/ISO members

Interested parties that specifically request to be sent the material either via surface mail or email

REQUIREMENT: Distribution 4 Weeks prior to meeting (SD-2 4.3.3)

Pre and post meeting distribution sent to:

- Principals
- FEW additional others:
 - Alternates that wish to receive the material
 - Active participants, such as former members, that specifically ask to receive the material

REQUIREMENT: Distribution of Pre-Meeting 2 Weeks before meeting
(documents for action - two week rule: SD-2 4.3.4:1)

Minutes sent to (required by X3):

- Principals
- Alternates
- Observers, consultants, liaisons

REQUIREMENT: Distribution 4 Weeks Following Meeting Adjournment (SD-2 4.2.5, 4.3.6)

Appendix D
Committee Organization

Officers

Chair	J. Wagener
Vice Chair	L. Rolison
International Rep	D. Hendrickson
Secretary	C. Dedo (acting)
Treasurer	M. North
Librarian	M. North
Editor	R. Maine
Maintenance	R. Bleikamp
Vocabulary Rep.	K. Hirschert

Subgroups

The subgroup names shown below are essentially historical. At this meeting, the Chair suggested an alternate alignment of committee members to the historically named subgroups in order to handle the work objectives of the meeting. Not all groups were active at this meeting.

X3J3/Edit: Prepares the draft standard; responsible for documents 007 and 008
R. Maine (Head)

X3J3/Interop Interoperability with other computing languages; Interoperability Technical Report
liaison
H. Zongaro (Head)

X3J3/Interp: Interpretation request processing; standing document 006
R. Bleikamp (Head)

X3J3/JOR: Journal of Requirements for 1996 (standing document 004)
J. Adams, C. Dedo, R. Bleikamp, L. Rolison, S. Whitlock (Head)

X3J3/OOF: Object-Oriented Fortran - Data Enhancements Technical Report
D. Epstein, K. Hirschert (Head), J. Martin, L. Meissner

X3J3/Parallel: Parallel computing; in particular, coordinates with X3H5 and HPFF; Exception Handling
Technical Report
K. Bierman, W. Brainerd, R. Hendrickson (Head), R. Maine

Appendix E
Membership Summary

X3J3 Meeting Attendance (Principal Members)

Meeting #	23	24	25	26	27	28	29	30	31	32	33	34	35	36
Location	CT	FL	IL	BE	NM	CA	NV	ED	MA	TX	HI	CO	CA	NV
Date	11	02	05	07	11	02	05	08	11	01	04	08	11	02
	92	93	93	93	93	94	94	94	94	95	95	95	95	96
Name	Affiliation													
Barber, Graham	R	A	A**	R**	R	A	R	R	V	A	V	A**	V	R
Bierman, Keith	V	V	V	V	V	V	V	V	V	V	V	V	V	V
Brainerd, Walt	V	A	A**	R**	V	R	V	R	A	V	R	V	V	V
Bush, Bruce	R	R	R	R	R	R	R	A	R	A**	V	A**	V	R
Dedo, Craig					P	V	V	A	V	V	V	V	V	V
Epstein, David										P	V	V	V	V
Hendrickson, Dick	V	V	V	V	V	V	V	V	A	V	A**	V	V	V
Hirchert, Kurt	V	V	V	V	V	V	V	V	V	V	V	V	V	V
Levine, David	R	R	R	R	V	V	V	A	V	V	A	V	A**	R
Maine, Richard	V	A	V	V	A	V	V	A	V	V	V	V	V	V
North, Mallory	V	V	V	A	V	V	V	V	V	V	V	V	V	V
Rolison, Larry	R	R	V	V	V	V	R	V	V	V	V	V	V	V
Smith, Brian	R	A	R	A**	R	R	R	A	R	R	V	A	A**	R
Terpstra, Ted	V	V	V	A	V	V	V	A	V	E	V	V	V	A
Wagener, Jerry	V	V	V	V	V	V	V	V	V	V	V	V	V	V
Warnock, Tony									P	V	A	V	V	A
Whitlock, Stan	V	V	V	A	V	V	V	A	V	V	V	V	V	V
Zongaro, Henry	R	R	R	R	R	R	R	R	R	R	R	R	R	A

- V present and voting
- R absent but represented
- A absent and not represented
- P present but not voting
- E excused
- Q resigned
- ** missed 2 of last 3 meetings
- *** LOST membership

Other Changes:
 Convex was purchased by Hewlett-Packard so Convex no longer has an independent membership; Richard Bleikamp is now David Levine's alternate.
 Jeanne Martin gave up her principal membership and is now Brian Smith's alternate.

Total Membership at beginning of Meeting: 18
 One over Half: 10
 Quorum: 6
 Total Membership at end of Meeting: 18
 Total Members Attended or Represented: 15
 Total Attendees: 18

Alternates representing principals at meeting:
 John Cuthbertson (Graham Barber)
 Tom Lahey (Bruce Bush)
 Rich Bleikamp (David Levine)
 Jeanne Martin (Brian Smith)

Changes since Meeting 135:

Lost Membership:
 Jose Oglesby (Microsoft)
 James Himer (Self)

Visitors at Meeting:

New Members:
 (none)

Non-voting alternates present:
 Jeanne Adams

Prospective members (observer meeting):
 Loren Meissner (self)
 Baker Kearfott (affiliation not yet declared)

Appendix F
X3J3 Membership

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X3J3 ANSI Fortran Standards Committee
Meeting 136 Minutes - Unapproved

X3J3 / 96-053

Craig T. Dedo
March 8, 1996
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X3J3 ANSI Fortran Standards Committee
Meeting 136 Minutes - Unapproved

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Craig T. Dedo
March 8, 1996
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Meeting 136 Minutes - Unapproved

X3J3 / 96-053

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