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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 J OR 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 Hirchert
   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 X3J 3.

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 X3J 3, 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 3 and WG5.
Asynchronous I/O (95-312r1 Item B2). Richard Bleikamp may have developed a proposal. There 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 Hirchert, J eanne 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
- J OR is comparing the contents of Corrigendum 3 with the individual interpretations. There should be a report by Tuesday afternoon.
- J OR will be starting work on Asynchronous I/O as soon as Richard Bleikamp arrives. This proposal relates to items 79 and 80 in the J OR.
- There may or may not be any work on Command Line Arguments. Variations in this feature are mentioned in J OR Items 16, 40, and 41. One possibility is to point to the POSIX Binding.
- J OR would like to reserve some agenda time on Thursday morning for discussion of which J OR 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. J OR 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 J OR 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.

J OR
● Paper 96-040r1, Async I/O: Requirements for F 2000, is available.
● There will be a discussion on Thursday on more J OR 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
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 J OR Items
96-044r1, Three Proposed J OR Items
96-046, Proposed J OR Item on Generic Pointers

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

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

Motion: Add the following J OR 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.

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

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

<table>
<thead>
<tr>
<th>Item #</th>
<th>Straw Vote</th>
<th>Actual Vote</th>
<th>Result</th>
<th>JOR Item Title</th>
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<tbody>
<tr>
<td>88</td>
<td>8 3 2 9 5</td>
<td>Pass</td>
<td>Allow User to Define Precedence of User-defined Operators</td>
<td></td>
</tr>
<tr>
<td>89</td>
<td>9 2 2 10 4</td>
<td>Pass</td>
<td>Generic Pointers</td>
<td></td>
</tr>
<tr>
<td>90</td>
<td>4 8 4 0 12</td>
<td>Fail</td>
<td>Optional START Statement</td>
<td></td>
</tr>
<tr>
<td>91</td>
<td>8 2 6 12 2</td>
<td>Pass</td>
<td>Extend MAX, MIN, and Related Intrinsic to CHARACTER Variables</td>
<td></td>
</tr>
<tr>
<td>92</td>
<td>4 7 4 2 11</td>
<td>Fail</td>
<td>LEN=* for Initialization of CHARACTER Variables</td>
<td></td>
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<td>8 1 6 7 3</td>
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<tr>
<td>94</td>
<td>12 0 1 13 0</td>
<td>Pass</td>
<td>Extend Initialization of COMPLEX Variables</td>
<td></td>
</tr>
</tbody>
</table>

### 4.2 Tutorial on Interval Arithmetic

discussion Leader: Professor R. Baker Kearfott
References: 96-028, Interval Arithmetic in Fortran - Some Specifics

D:\X3J3 \ X3J3 \ 96-053.WPD
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 Hirchert 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 Hirchert Second: Richard Maine
Amendment: Add a reference to paper 95-275 in the first sentence
Moved: Keith Bierman Second: Kurt Hirchert
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 Hirchert 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 Gannt 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 Hirchert
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 Hirchert: 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 J OR with all of the new items included.
    Status: New
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 J OR 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. Hirchert
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 Subgroup heads
12:00 Lunch
1:30 Subgroup Meetings

Thursday, February 8, 1996
8:30 Subgroup reports and processing Subgroup heads
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 X3J 3 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  C. Dedo
   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  J. Wagener
   1.11 Local arrangements  J. Wagener
   1.12 Subgroup assignments  J. Wagener
   1.13 Conditional compilation presentation  D. Epstein
       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 (3:00 pm)  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

#### X3J 3 Register of Documents for 1996

#### Standing Documents

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#### 1996 Papers

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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. Hirchert

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/OR: 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. Hirchert (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)

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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.

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

**Visitors at Meeting:**
- 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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