

Minutes of Meeting 140

J3 ANSI Fortran Standards Committee

February 10-14, 1997

Las Vegas, Nevada

J3/97-150

1. ATTENDANCE

1 invited speaker: Arnold Winkler

37 delegates:

- WG5 Convenor: Miles Ellis
- J3 Chairman: Jerrold Wagener
- Austria: Gerhard Schmitt, David Schmitt
- Finland: Petri Mahonen
- Germany: Michael Hennecke, Wolfgang Walter, Manuela Zuern
- Japan: Masakaza Hayashi, Masayuki Takata
- Netherlands: Mattings Van Waveren
- UK: Malcolm Cohen, John Cuthbertson, Keng Low, Steve Morgan, David Muxworthy, John Reid
- US: Jeanne Adams, Keith Bierman, Richard Bleikamp, Walt Brainerd, Viktor Decyk, Craig Dedo, Dick Hendrickson, Kurt Hirschert, Baker Kearfott, Richard Maine, Jeanne Martin, Loren Meissner, Mallory North, Charles Norton, Larry Rolison, Bob Runyan, Reva Sacks, Van Snyder, Tony Warnock, Stan Whitlock, Henry Zongaro

2. OPENING REMARKS (Ellis)

Objectives are to establish Fortran 2000 requirements, and to make recommendations as to ongoing projects including Technical Corrigendum 3 and Fortran 95.

3. OPENING REMARKS (Wagener)

Appointments for the meeting are:

Librarian: M. North

Secretary: L. Meissner

Drafting Committee (for WG5 resolutions): Muxworthy, Wagener, Ellis

Technical Subgroup Heads/Assistant Heads: Hendrickson/Kearfott (High Performance), Zuern/Cuthbertson (Data), Whitlock/Bleikamp (Miscellaneous).

Objectives are to complete Fortran 2000 requirements; to further develop technical specifications for selected requirements; and to make recommendations concerning WG5 projects on C Interoperability and Conditional Compilation.

Plenary session actions will be based only on recommendations from technical subgroups, except in unusual cases.

4. AGENDA (Wagener)

Motion to adopt Agenda, WG5/N1234 (Whitlock, Dedo) approved unanimously.

5. MINUTES OF PREVIOUS MEETINGS (Wagener)

Motion to adopt minutes of WG5 meeting, Dresden July 1996, WG5/N1220 (Ellis, Hennecke) approved unanimously.

Motion to adopt minutes of J3 meeting, Las Vegas November 1996, J3/96-180 (Maine, Hendrickson) approved unanimously.

6. REPORT ON OFFICIAL ACTIONS OF SC22 and ITIC (formerly X3) (Ellis)

The rules for final processing of draft standards have been changed slightly. There will be a "final" ballot on the technical committee draft; comments at this stage may result in changes. This will be followed by

a single Draft International Standard ballot with no comments. With regard to WG5 documents in progress, the new rules will apply to the Technical Report on C Interoperability and to the Part on Conditional Compilation. Some changes in editorial rules have been forwarded to all WG5 Project Editors.

New work items now require active participation by 5 member bodies; implementation of this rule has created a problem in the case of GKS binding to Fortran 90, as described in a communication from SC24 (J3/97-130), which will be the subject of a resolution at this meeting.

7. NATIONAL ACTIVITY REPORTS (Ellis)

Reports from Germany (WG5/N1249) and US (WG5/N1258) have been submitted in writing.

8. STATUS OF FORTRAN 2000 REQUIREMENTS (Ellis)

Document J3/97-010 lists the current status, and references current documentation for projects that are under way. Electronic subgroups established at Dresden had prepared documents based on documents WG5/N1238, /N1239, and /N1240 for consideration by subgroups at this meeting.

WG5 Technical Reports on Floating Point Exception Handling (WG5/N1231) and Enhanced Derived Type Facilities (WG5/N1230) are the subjects of current letter ballots.

Development groups for WG5 projects on C Interoperability (WG5/1237) and Conditional Compilation (WG5/N1243; see also WG5/N1247 and WG5/N1208) met separately during this week. Technical reports will require integration into Fortran 2000.

Defect management for Fortran 95 will begin after final approval.

FORTRAN 77 and Fortran 90 will remain as US national standards; some future US action may be taken in this regard.

9. INTERNATIONALIZATION (Arnold Winkler)

Issues identified by SC20, including defining and handling culturally dependent "locale" information, were described and discussed. WG5 was urged to accommodate internationalization insofar as possible.

10. SUBGROUP RECOMMENDATIONS (Wagener)

High Performance group requested guidance from the full group concerning Interval arithmetic (WG5/N1252, /N1253); individuals expressed preference as follows:

- Required part of Fortran 2000, 7;
- Optional part of Fortran 2000, 24;
- Undecided, 5

Miscellaneous subgroup reported its discussion of WG5/N1240. The subgroup recommended deletion of selected items that had previously been classified as requirements for "Minor Technical Enhancements," and requested guidance from the full group. A majority of the group preferred to delete the following items: Allow MERGE in constant expressions (M.9), Named scratch files (M.10), Specifying default precision (M.12), and More than 7 array dimensions (M.14).

Final actions resulting from other recommendations of High Performance, Data, and Miscellaneous Subgroups are reported below.

11. SCHEDULE FOR FORTRAN 2000 (Ellis)

The group was requested to express its preference for "Maintain the current schedule, according to which the next Fortran standard would be published in November 2001." Individuals: (18-19); countries (2-5).

The group was requested to express its preference for "Choose a revised planned publication date and schedule the work to fit that date." Individuals: (29-6); countries (6-1).

The group was requested to express its preference for "The revised planned publication date should not be later than November 2003." Individuals: (37-0).

"The revised planned publication date should not be later than November 2002." Individuals: (26-11).

"The revised planned publication date should not be later than May 2002." Individuals: (7-28).

"Confirm that the revised planned publication date should be November 2002." Countries: (6-1).

Anticipating that Interoperability with C would be the subject of a resolution, the group expressed its preference for "Interoperability with C is a Fortran 2000 requirement." Individuals: (31-0). Wagener noted that all current Technical Report projects are Fortran 2000 requirements but are not considered J3 work items except for integration.

The following chart summarizes individual preferences for items previously identified by WG5 as requirements, along with those recommended by the Subgroups. Column 1 reflects individual preferences, expressed during Subgroup reports, for giving items further consideration. Column 2 shows individual preferences to categorize items as A (high), B (medium), or C (low) priority. Column 3 refines Column 2 for selected items.

= Feature Name =====	1	2	3
		; A- B- C; A- B- C;	
derived type I/O		;17-14- 4;20-15-	
procedure pointers		;22-10- 2;	
inheritance (EXTENDS)	32- 5;	25- 6- 4;	
polymorphism (OBJECT)		;22- 9- 4;	
internationalization	34- 1;	16-17- 2;18-16-	
parameterized derived types		;14-14- 7;14-21-	
interval arithmetic		;11- 8-12;12-11-13;	
constructors/destructors	30- 4;	13-15- 7;17-17-	
asynchronous I/O		;14-15- 1;15-19-	
VOLATILE attribute	yes	; 7-16- 5;	
allow public entities of private type	yes	; 4-16-14; -18-15;	
PUBLIC and PRIVATE components	yes	; 2-20-12;	
stream I/O	21- 6;	6-20-7	
command line arguments	29- 4;	6-15-12; -19-13;	
access to status error messages	yes	; 5-16-13; -20-14;	
IEEE I/O rounding inquiry intrinsics	yes	; 7-10-13; -17-17;	
user-specified operator precedence	11-16;	3- 9-21;	
ASSERT statement or construct	yes	; 2- 6-21;	
pointer association classes	20- 1;	2- 6-20;	
aliasing type definitions	yes	; 4-13-17; -11-20;	
regularize KIND	yes?	; 0- 4-31;	
extend ALLOCATE to nonkind	23- 3;	3-13-17;	
exception handling	21- 9;	9-10-16; -12-21;	
any kind integer in I/O specifiers	28- 5;	3-13-18;	
internal procedures as actual args	17-14;	7- 9-18;	
tabs in data	22- 7;	2- 7-25;	

tabs in source	20-15; 3- 8-22;	;
regularize random seed	19- 5; 8- 8-19;	;
packed LOGICAL	15-15; 5- 4-25;	;
SWAP operator	12-12; 2- 2-31;	;
preconnected unit number inquiry	17-10; 2- 6-26;	;
separate module spec	15- 8; 3-12-19;	;

=====

Country preferences were expressed concerning selected items:

- interval arithmetic (A, 4; B, 1)
- IEEE I/O rounding inquiry intrinsics (B, 4; C, 3)
- parameterized derived types (A, 5; B, 2)
- user-specified operator precedence (B, 4; C, 2)
- internal procedures as actual args (B, 1; C, 4)
- constructors/destructors (A, 3; B, 3)
- asynchronous I/O (A, 5; B, 2)

Individual preferences were expressed concerning selected existing Minor Technical Enhancement requirements:

- M6, extend initialization expressions (27-4)
- M8, liberalize BOZ constants (9-13)
- M9, MERGE in constant expressions (6-18)
- M12, default precision (7-15)
- M13, processor-dependent features list (10-13)
- M15, renaming operators (21-4)
- M16, data type encapsulation (32-0)
- M17, enhanced complex constants (23-2)

Convenor stated that he will expand N1259 (Content of Fortran 2000) to include a more meaningful title for each item, suitable for posting on various Fortran news groups.

12. SUBGROUP REPORTS (Wagener)

Data subgroup proposed syntax for parameterized derived types. Motion to accept J3/97-104r2 (Maine, Cuthbertson) approved (23-2).

Data subgroup reviewed M16, data type encapsulation; see J3/97-145. There is a small error in F90 but defect processing has terminated. It can be processed during defect management for Fortran 95, and the corresponding correction can be incorporated into Fortran 2000. If this is done, Fortran 2000 will agree with Fortran 95 but both will be slightly different from Fortran 90. Technically, the defect relates to user-defined assignment of components of a derived type. Straw vote to process as a Fortran 95 defect: (29-0-1).

Data subgroup presented Pointers to Procedures. Motion to accept J3/97-147 as syntax (Maine, Snyder); after discussion, motion to table until the J3 meeting in May 1997 (Meissner, Kearfott); tabled by unanimous consent.

Miscellaneous subgroup described the effect of "copy in, copy out" semantics on asynchronous I/O. Straw vote, this is the proper direction: (24-0-3).

High Performance recommended that numbers of real type should not be mixed with intervals in an interval expression. Straw vote on this recommendation as described in J3/97-143: (26-2-0).

13. RECONSIDERATION (Ellis)

By request of three countries that had preferred category B for user-specified operator precedence, this item was reconsidered. The reconsidered result was (B, 2; C, 4).

14. FUTURE MEETINGS (Ellis, Wagener)

Gerhard Schmitt discussed arrangements for the next WG5 meeting in Vienna July 21-25, 1997. Delegates should request further information from Gerhard if they require a less expensive hotel or if they need parking facilities.

Final arrangements for a WG5 meeting in 1998 will be determined at Vienna.

Future J3 meetings:

- 12-16 May 1997, Las Vegas, Nevada
- 11-15 Aug 1997, Breckenridge, Colorado
- 10-14 Nov 1997, Las Vegas, Nevada
- 16-20 Feb 1998, Lafayette, Louisiana
- May 1998, Terre Haute, Indiana
- Aug 1998, Edinburgh, Scotland

15. RESOLUTIONS (Muxworthy)

Resolutions in document WG5/N1261 were discussed. With regard to LV8, Convenor expressed his intent to carry out the referenced letter ballot by approximately March 31, 1997. Resolutions LV1 to LV10 were adopted unanimously except as follows: LV2, G Schmitt abstains; LV7, Germany and Walter abstain; LV10, Mahonen and Walter object. Resolutions LV11 and LV12 were adopted by acclamation.

16. DOCUMENT NUMBER CROSS REFERENCE

The following documents have both WG5/N and J3/97- numbers:

(1151=134), (1235=107), (1237=108), (1241=109), (1242=110), (1243=111), (1245=102), (1246=101), (1247=112), (1252=105), (1253=113), (1255=115), (1256=116), (1259=138r1), (1261=1242r2), (1263=139), (1265=135), (1266=137r1), (1267=124), (1268=128), (1269=129r1), (1270=114r2), (1271=126), (1272=131).

Appendix A
Agenda for J3/WG5 Joint Meeting 140

ISO/IEC JTC1/SC22/WG5 N1234

Draft Agenda

Joint Meeting of ISO/IEC JTC1/SC22/WG5 and ANSI/X3J3

February 10-14, 1997

**Sunrise Suites, 4575 Boulder Highway
Las Vegas, NV 89121, USA**

Monday, February 10 0830 - 2200

Tuesday, February 11 0830 - 1730

Wednesday, February 12 0830 - 2200

Thursday, February 13 0830 - 1730

Friday, February 14 0830 - 1730

Note that this meeting is a joint meeting of ANSI/X3J3 and ISO/IEC JTC1/SC22/WG5, and is a full meeting of each committee. Agenda items marked with a # will be chaired by the Chairman of X3J3, agenda items marked with ## will be chaired by the respective development body project editors, and other agenda items will be chaired by the Convenor of WG5.

The major item of business is the finalisation of the content for the next revision of Fortran (Fortran 2000), and the commencement of technical work on some of the items therein. A substantial part of the meeting will be devoted to working in subgroups, with subgroup heads chosen equally from the WG5 and X3J3 membership. In order to expedite matters, items preceded by an asterisk will not have any agenda time and will be the subject of written reports only. Moreover, it is intended to operate the meeting to a detailed timetable, which will be confirmed under agenda item 2.5. *The provisional timetable is appended to this revised agenda.*

1. Opening of the Meeting: 8.30 am, February 10, 1997

#2. Opening business

- 2.1 Introductory remarks from the WG5 Convenor and the X3J3 Chair
- 2.2 Local arrangements
- 2.3 Appointments for this meeting
- 2.4 Meeting objectives
- 2.5 Adoption of the Agenda
- 2.6 Approval of the Minutes of the Dresden WG5 Meeting
- 2.7 Approval of the Minutes of X3J3 Meeting #139
- 2.8 Other opening business

3. Status of Dresden Resolutions*4. Reports**

- 4.1 Urgent SC22 and X3 Matters
- * 4.2 National Activity Reports (Heads of Delegations)
- 4.3 Report from Primary Development Body (X3J3 Chair)
- 4.4 Reports from other Development Bodies (Editors/Heads)
- * 4.5 Liaison Reports

***5. Defect Management Issues**

- 5.1 Fortran 90
- 5.2 Fortran Part 2 _ Varying Length Strings
- 5.3 Fortran Part 1 _ Fortran 95

##6. Processing of Technical Reports and other Standards

- 6.1 TR on Interoperability with C
- 6.2 Fortran Part 3 _ Conditional Compilation

7. Identification of Fortran 2000 Requirements

- 7.1 High Performance Computing Requirements
- 7.2 Data Extensibility Requirements
- 7.3 Miscellaneous Requirements (including Internationalization Requirements)
- 7.4 Final Proposed Content of Fortran 2000

#8. Development of Fortran 2000 Requirements

- 8.1 High Performance Computing Features
- 8.2 Data Extensibility Features
- 8.3 Miscellaneous Features

#9. Any other Technical Items**10. Closing Business**

- 10.1 Future WG5 meetings
- 10.2 Future X3J3 meetings
- 10.3 Other closing business

11. Adoption of Las Vegas Resolutions**12. Adjournment: 5.30 pm, February 14, 1997**

The provisional timetable for the meeting is as follows:

Monday February 10

- 8.30 - 11.30 Agenda items 2 and 4
- 11.30 - 12.00 Tutorial by Arnold Winkler, Convenor of WG20, on the Internationalization aspects of agenda item 7.3
- 1.30 - 5.00 Work in subgroups on items 7.1, 7.2 and 7.3
- 5.00 - 5.30 Reports from subgroup heads
- 8.00 - 10.00 6.1 Meeting of the interoperability development body

Tuesday February 11

- | | |
|-------------|--|
| 8.30 - 5.00 | Processing of subgroup papers from items 7.1, 7.2 and 7.3, followed by work in subgroups on items 7.1, 7.2 and 7.3 |
| 5.00 - 5.30 | Reports from subgroup heads |

Wednesday February 12

- | | |
|--------------|---|
| 8.30 - 12.30 | 7.4 Determination of final proposed content of Fortran 2000 |
| 2.00 - 5.00 | Work in subgroups on items 8.1, 8.2 and 8.3 |
| 5.00 - 5.30 | Reports from subgroup heads |
| 8.00 - 10.00 | 6.2 Meeting of the conditional compilation development body |

Thursday February 13

- | | |
|-------------|--|
| 8.30 - 4.00 | Processing of subgroup papers from items 8.1, 8.2 and 8.3, followed by work in subgroups on items 8.1, 8.2 and 8.3 |
| 4.00 - 5.00 | Preliminary discussion of proposed resolutions |
| 5.00 - 5.30 | Reports from subgroup heads |

Friday February 14

- | | |
|--------------|---|
| 8.30 - 12.30 | Completion of subgroup work on items 8.1, 8.2 and 8.3, and item 9 |
| 2.00 - 5.30 | Agenda items 10 and 11 |

Note that although the days on which the various items will be discussed are intended to be as shown, all times are only approximate and are subject to alteration in the light of circumstances.

All delegates will be assigned to one of three technical subgroups: High Performance Computing (HPC), Data Extensibility (DATA), and Miscellaneous (MISC). These subgroups will function throughout the meeting, as indicated above, both for identification of requirements (7.1, 7.2 and 7.3) and development of requirements (8.1, 8.2 and 8.3). The provisional subgroup heads are: HPC - Dick Hendrickson, assisted by Baker Kearfott; DATA - Manuela Zrn, assisted by John Cuthbertson; MISC - Stan Whitlock, assisted by Christian Weber.

Note also that items 6.1 and 6.2 will be discussed by their respective development bodies in the evenings of Monday and Wednesday, respectively, continuing on Thursday evening if necessary, with full WG5 consideration being limited to discussion of draft resolutions recommended by these development bodies.

Appendix B

J3 Register of Documents for 1997

Standing Documents

<u>Paper Number</u>	<u>Title</u>
J3/97-000	Register of Documents
J3/97-001	Membership List
J3/97-002	(Unused)
J3/97-003	X3J3 Member References
J3/97-004	Journal of Development
J3/97-005r1	X3J3 Resolutions and Responses to WG5 Resolutions
J3/97-006	Defect Report
J3/97-007	Draft Revision to Fortran 95
J3/97-008	Editorial Considerations for Fortran 2000 Draft Revision
J3/97-009	Technical Proposals for Future Revisions
J3/97-010	J3 Fortran 2000 Work Plan
J3/97-011	- 97/100 are currently unassigned

1997 Papers

<u>Paper Number</u>	<u>Submitter</u>	<u>Date</u>	<u>Title</u>
J3/97-101	Bleikamp	970117	Functional Specification for Derived Type I/O (WG5-N1246)
J3/97-102	Bleikamp	970115	Syntax and Edits for Async I/O
J3/97-103	Maine	970124	Specs and Preliminary Syntax for R.3 Procedure Pointers
J3/97-104r2	Maine	970114	Specifications and Syntax for R.5 Parameterized Derived Types
J3/97-105	Kearfott	970118	Interval Arithmetic - The Data Type and Low-Level Operations
J3/97-106	Cuthbertson	970126	A Proposal for OO Features in Fortran (J3/96-172)
J3/97-107	Hennecke	961203	Interoperability with C and Binding to POSIX.1 (WG5-N1235)
J3/97-108	Hennecke	961220	Interoperability Technical Report (WG5-N1237)
J3/97-109	Dedo	970106	Variable Format Expressions - Technical Specification (WG5-N1241)
J3/97-110	Dedo	970106	Command Line Arguments and Environmental Variables (WG5-N1242)
J3/97-111	Epstein	970112	Part III, Conditional Compilation
J3/97-112	Rolison	970117	cpp-Like Source Processing (CoCo)
J3/97-113	Kearfott	970124	Interval Intrinsic Functions
J3/97-114r2	Snyder	970122	Proposals for Discussion for Fortran 95, Fortran 2000, and Fortran 2005
J3/97-115	Dedo	970124	Strategic Planning Assumptions for Fortran 2000
J3/97-116	Dedo	970124	General Planning Considerations for Fortran 2000
J3/97-117	Clodius	970207	Parametric Procedures and Modules
J3/97-118	Clodius	970207	Example Syntaxes for Parametric Procedures and Modules
J3/97-119	Clodius	970207	Critical Issues for Object-Oriented Fortran
J3/97-120	Snyder	970210	Extended TYPE and SUBTYPE Notation for Fortran
J3/97-121	Snyder	970210	Impact of Uniform Syntax on Parallel Computation
J3/97-122	Snyder	970210	Comments on SC22/WG5/N1188: Class Inheritance and Dynamic Binding Polymorphism in Fortran 2000
J3/97-123	Snyder	970210	Alternative to N1237 and 97-108
J3/97-124	Cuthbertson	970211	/Data Category-1 Requirements
J3/97-125	Bierman /HPC970211		Assertions
J3/97-126	Bierman /HPC970211		IEEE I/O
J3/97-127	Zongaro /HPC970211		Pointer Association Classes
J3/97-128	Whitlock/MISC 970211		MISCellaneous Requirements for F2000
J3/97-129r1	van Waveren 970211		Volatile Requirement
J3/97-130	Ellis	970211	Objection to the Proposed Cancellation of Project 1.24.02.09 CD of GKS Fortran Binding
J3/97-131	Cohen	970211	Single Inheritance Model
J3/97-132	Cuthbertson	970211	/Data Category-2 Requirements
J3/97-133	Reid	970212	Schedule for Fortran 2000
J3/97-134	Reid	970212	Strategic Plan for Fortran Standardization (WG5-N1151)
J3/97-135	Hennecke	970212	Required Changes to N1237 (97-108)
J3/97-136	Kearfott	970213	Interval Relational Operators

J3/97-137r1	Dedo	970213	Fortran-Like CoCo Scribe Notes (WG5-N1266)
J3/97-138r1	Ellis	970213	Content of Fortran 2000
J3/97-139	Ellis	970213	Result of SC22 Ballot on Technical Corrigendum 3 to IS 1539:1991
J3/97-140r1	Wagener	970213	Requirements Priorities
J3/97-141	Bierman	970213	Interval Intrinsic (Exceptions)
J3/97-142r2	Muxworthy	970213	Resolutions of the WG5/J3 Joint Meeting on February 10 to 14, 1997, in Las Vegas, Nevada
J3/97-143	Hendrickson	970213	Mixed Mode Interval Calculations Prohibited
J3/97-144	Bleikamp	970213	Copyin/Copyout and Async I/O
J3/97-145	Cohen	970213	Derived Type Encapsulation
J3/97-146	Reid	970213	Internationalization
J3/97-147r1	Maine	970213	Specifications and Preliminary Syntax for R.3, Procedure Pointers (97-103)
J3/97-148	Ellis	970214	WG5 Numbers for J3 Papers
J3/97-149	North	970214	Meeting 140 Treasurer's Report
J3/97-150	Meissner	970214	Meeting 140 Minutes

Appendix C

Future Meetings and Distribution/Secretarial Assignments

Meeting conventions:

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

Future meeting schedule:

- 142 Aug 11-15, 1997 - Breckenridge, Colorado (L. Rolison/J. Adams/M. North, acting hosts)
 Pre-meeting distribution deadline: July 7, 1997
 Pre-meeting distribution: Electronic
 Post-meeting distribution: Electronic (K. Bierman, if needed)
 Acting secretary: W. Brainerd
- 143 November 10-14, 1997 in Las Vegas, NV (M. North, acting host)
 Pre-meeting distribution deadline: October 6, 1997
 Pre-meeting distribution: Electronic
 Post-meeting distribution: Electronic (K. Hirschert, if needed)
 Acting secretary: J. Cuthbertson
- 144 February 16-20, 1998 in Lafayette, LA {B. Kearfott, host}
 Pre-meeting distribution deadline: January 12, 1998
 Pre-meeting distribution: Electronic
 Post-meeting distribution: Electronic (R. Maine, if needed)
 Acting secretary: D. Epstein
- 145 May, 1998 in Terre Haute, IN (M. North, host)
 Pre-meeting distribution deadline: April ??, 1998
 Pre-meeting distribution: Electronic
 Post-meeting distribution: Electronic (L. Rolison, if needed)
 Acting secretary: D. Hendrickson

Committee materials availability:

Agenda and meeting notice available at the J3 ftp site. Sent individually to other 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 available at the J3 ftp site. Sent individually to other interested parties that specifically request to be sent the material either via surface mail or email.

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

Minutes available at the J3 ftp site.

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

Appendix D Committee Organization

D.1 Officers

Chair	J. Wagener
Vice Chair	L. Rolison
International Rep	K. Bierman
Secretary	Open (rotating)
Treasurer	M. North
Librarian	M. North
Editor	R. Maine
Maintenance	R. Bleikamp
Vocabulary Rep.	K. Hirschert

D.2 Subgroups

Due the changing nature of work that needs to be accomplished as the committee moves into development of the Fortran 2000 standard, work groups generally vary from meeting to meeting as the work load dictates. The Chair suggests work groups prior to each meeting and then the membership and responsibilities of each work group are fine-tuned (usually dependent on the actual attendance) the morning of the first meeting day. For this meeting, the work groups were (this was a joint meeting with WG5; only J3 members are listed in the work groups) :

- JOR: Responsible for the development and maintenance of the Journal of Development (standing document 004)
C. Dedo, L. Rolison, B. Runyan, S. Whitlock (Head)
- HPC: Responsible for numerical computing topics; in particular, high performance computing
K. Bierman, D. Hendrickson (Head), B. Kearfott, T. Warnock
- Data: Responsible for language design topics related to data and data structures such as procedure variables and parameterized derived types
J. Cuthbertson (Head), M. Ellis, D. Epstein, K. Hirschert, R. Maine, J. Martin
- I/O: R. Bleikamp (Head), W. Brainerd, L. Meissner, J. Adams

Appendix E Membership Summary

J3 Meeting Attendance (Principal Members)

Meeting #		130	131	132	133	134	135	136	137	138	139	140
Location		ED	MA	TX	HI	CO	CA	NV	NV	NV	NV	NV
Date		08	11	01	04	08	11	02	05	08	11	02
		94	94	95	95	95	95	96	96	96	96	97
<u>Name</u>	<u>Affiliation</u>											
Bierman, Keith	Sun	V	V	V	V	V	V	V	V	V	V	V
Brainerd, Walt	Unicomp	R	A	V	R	V	V	V	A	A**	V**	V
Cohen, Malcolm	Nag									P	E	V
Cuthbertson, John	EPC	RP	RP	A	RP	A**	RP	V	V	A	V	V
Dedo, Craig	self	A	V	V	V	V	V	V	V	V	V	V
Epstein, David	self			P	V	V	V	V	V	V	V	A
Hendrickson, Dick	self	V	A	V	A**	V	V	V	V	V	V	V
Hirschert, Kurt	U. of Illinois	V	V	V	V	V	V	V	V	V	V	V
Kearfott, R. Baker	self							P	V	V	V	V
Maine, Richard	NASA	A	V	V	V	V	V	V	V	V	V	V
Meissner, Loren	self							P	V	V	V	V
North, Mallory	Rose-Hulman	V	V	V	V	V	V	V	V	V	V	V
Rolison, Larry	SGI/CR	R	V	V	V	V	V	V	V	V	V	V
Runyan, Bob	Lahey	A	RP	A**	R	A**	RP	R	V	A	V	V
Sacks, Reva	HP	A	RP	RP	A	RP	A**	R	RP	RP	RP	V
Smith, Brian	UNM	A	R	R	V	A	A**	R**	R	A	R	R
Wagener, Jerry	Zvyvogs	V	V	V	V	V	V	V	V	V	V	V
Warnock, Tony	LANL		P	V	A	V	V	A	V	V	V	V
Whitlock, Stan	DEC	A	V	V	V	V	V	V	V	V	V	V
Zongaro, Henry	IBM	RP	RP	RP	V	RP	RP	A	V	V	A	V

V present and voting
 R absent but represented
 RP represented by a previous member from the same organization
 A absent and not represented
 P present but not voting
 E excused
 Q resigned
 ** missed 2 of last 3 meetings
 *** LOST membership

Total Membership at beginning of Meeting: 19
 One over Half: 11
 Quorum: 7
 Total Membership at end of Meeting: 20
 Total Members Attended or Represented: 19
 Total Attendees: 20

Changes since Meeting 139:

Lost Membership:

New Members: Malcolm Cohen

Other Changes:

Alternates representing principals at meeting:
 Jeanne Martin (for Brian Smith)

Visitors at Meeting:

Viktor Decyk, Charles Norton

Non-voting alternates present:

J. Adams, R. Bleikamp

Prospective members (observer meeting):

Van Snyder

Appendix F J3 Membership

PRINCIPALS

Keith H. Bierman
Sun Microsystems, Inc.
SunSoft Developer Products
2550 Garcia
UMPK16-304
Mountain View CA 94043

Email: keith.bierman@sun.com

Phone: (415) 786-9296
Fax: (415) 786-9551

Alternate: Michael Ingrassia

Walter S. Brainerd
Unicom Inc.
1874 San Bernardino Ave NE
Albuquerque NM 87122

Email: walt@fortran.com

Phone: (505) 275-0800
Fax: (505) 856-1501

Alternate: Jeanne Adams, Charles Ritz

Malcolm Cohen
The Numerical Algorithms Group
Ltd
Wilkinson House
Oxford OX2 8DR
ENGLAND

Email: malcolm@nag.co.uk

Phone: 44 (1865) 51 1245
Fax: 44 (1865) 31 0139

John S. Cuthbertson
Edinburgh Portable Compilers, Ltd.
17 Alva Street
Edinburgh EH2 4PH
SCOTLAND

Email: johnc@epc.co.uk

Phone: 011 44 131 225 6262
Fax: 011 44 131 225 6644

Alternate: Graham Barber

Craig T. Dedo
17130 W. Burleigh Place
Brookfield WI 53005

Email: Craig.Dedo@mixcom.com

Phone: (414) 783-5869

David Epstein
Imagine1
P.O. Box 250
Sweet Home OR 97386

Email: david@imagine1.com

Phone: (541) 383-4846

[Conditional Compilation]

Richard A. Hendrickson
50 Melbourne Ave SE
Minneapolis MN 55414

Email:
dick.hendrickson@worldnet.att.net

Phone: (612) 378-9694

Kurt W. Hirchert
University of Illinois
152 Computing Applications Bldg.
605 East Springfield Avenue
Champaign IL 61820

Email: hirchert@ncsa.uiuc.edu

Phone: (217) 333-8093
Fax: (217) 244-2909

Alternate: Murray Freeman

R. Baker Kearfott
Department of Mathematics

University of Southwestern
Louisiana
U.S.L. Box 4-1010
Lafayette LA 70504-1010

Email: rbk@usl.edu

Phone: (318) 482-5270
Fax: (318) 482-5346

Richard Maine
NASA Dryden
M/S D-2033
P.O. Box 273
Edwards CA 93523

Email: maine@altair.dfrc.nasa.gov

Phone: (805) 258-3316
Fax: (805) 258-3567

Alternate: Bruce Martin

Loren P. Meissner
2 Kerr Avenue
Kensington CA 94707

Email: lpmeissner@msn.com

Phone: (510) 524-5227

Dr. C. Mallory North, Jr.
Professor of Mechanical
Engineering
Rose-Hulman Institute of
Technology
5500 Wabash Ave.
Campus Box 150
Terre Haute IN 47803

Email: Charles.M.North@Rose-Hulman.Edu

Phone: (812) 877-8216
Fax: (812) 877-8025

Alternate: Patricia Brackin

Larry Rolison
Cray Research Inc.
655F Lone Oak Dr.

Eagan MN 55121
Email: lrr@cray.com
Phone: (612) 683-5807
Fax: (612) 683-5307

Alternate: Jon Steidel

Bob Runyan
Lahey Computer Systems Inc.
865 Tahoe Blvd
Suite 204
P. O. Box 6091
Incline Village NV 89450-6091

Email: bruny@lahey.com

Phone: (702) 831-2500 x422
Fax: (702) 831-8123

Alternate: Tom Lahey

Reva Sacks
Hewlett-Packard Company
Massachusetts Language Lab.
300 Apollo Drive
Chelmsford MA 01824

Email: sacks@apollo.hp.com

Phone: (508) 436-5920
Fax: (508) 436-5135

Alternate: Richard Bleikamp

Brian T. Smith
University of New Mexico
Computer Science Dept.
339 Farris Engineering Center
Albuquerque NM 87131

Email: bsmith@arc.unm.edu

Phone: (505) 277-5500
Fax: (505) 277-0813

Alternate: Jeanne T. Martin

Jerrold L. Wagener
Zvyvogs

6 East 5th
Suite 308
Tulsa OK 74103

Email: jwagener@ionet.net

Phone: (918) 592-3023
Fax: (918) 592-3023

Alternate: Rex Page

Tony Warnock
Los Alamos National Lab.
MS B265
CIC-3
P.O. Box 1663
Los Alamos NM 87545

Email: ttw@lanl.gov

Phone: (505) 667-2225

Stan Whitlock
Digital Equipment Corp.
ZK02-3/N30
110 Spit Brook Road
Nashua NH 03062

Email: whitlock@tle.enet.dec.com

Phone: (603) 881-2011
Fax: (603) 881-0120

Henry Zongaro
IBM Canada Ltd.
3T/123/1150/TOR
1150 Eglinton Avenue East
North York Ontario M3C 1H7
CANADA

Email: zongaro@vnet.ibm.com

Phone: (416) 448-6044
Fax: (416) 448-6057

Alternate: Wai Ming Wong

ALTERNATES

Jeanne C. Adams
NCAR

Scientific Computing Division
P.O. Box 3000
Boulder CO 80307

Email: jeanne@ncar.ucar.edu

Phone: (303) 497-1275
Fax: (303) 497-1137

Alternate to: Walt Brainerd

Richard Bleikamp
Convex Technology Center of
Hewlett-Packard Company
3000 Waterview Parkway
P. O. Box 833851
Richardson TX 75083-3851

Email: bleikamp@convex.com

Phone: (214) 497-4133
Fax: (214) 497-4500

Alternate to: Reva Sacks

Dr. Patricia Brackin
Rose-Hulman Institute of
Technology
Dept. of Mechanical Engineering
5500 Wabash Ave.
Campus Box 165
Terre Haute IN 47803

Email: Patricia.Brackin@Rose-Hulman.edu

Phone: (812) 877-8106
Fax: (812) 877-3198

Alternate to: C. Mallory North

Graham Barber
Edinburgh Portable Compilers, Ltd.
17 Alva Street
Edinburgh EH2 4PH
SCOTLAND

Email: gra@epc.co.uk

Phone: 44 131 225 6262
Fax: 44 131 225 6644

Alternate to: John S. Cuthbertson

Alternate to: Richard Maine

Murray F. Freeman
FOSI Limited
P.O. Box 184
Paupack PA 18451-0184

Email: x3t2mf@delphi.com

Phone: (717) 857-0658
Fax: (717) 857-1378

Alternate to: Kurt Hirschert

Michael Ingrassia
Sun Microsystems, Inc.
SunSoft Developer Products
2550 Garcia
UMPK16-304
Mountain View CA 94043

Email: michael.ingrassia@sun.com

Phone: (415) 786-8998
Fax: (415) 786-9551

Alternate to: Keith Bierman

Tom Lahey
Lahey Computer Systems Inc.
865 Tahoe Blvd
Suite 204
P. O. Box 6091
Incline Village NV 89450-6091

Email: tlahe@lahey.com

Phone: (702) 831-2500
Fax: (702) 831-8323

Alternate to: Bob Runyan

Bruce A. Martin
Relativistic Heavy Ion Collider
Build 911-C
Brookhaven National Laboratory
Upton NY 11973

Email: bam@bnl.gov

Phone: (516) 282-5647

Jeanne T. Martin
Lawrence Livermore Natl. Lab.
7000 East Avenue
P. O. Box 808
L-561
Livermore CA 94550

Email: jtm@llnl.gov

Phone: (510) 422-3753
Fax: (510) 423-8704

Alternate to: Brian Smith

Rex L. Page
School of Computer Science
University of Oklahoma
200 Felgar Street - Room 114
Norman OK 73109

Email: rlpaga@cs.uoknor.edu

Phone: (405) 325-4397
Fax: (405) 325-4044

Alternate to: Jerry Wagener

Charles Ritz
Fortran Journal
P.O. Box 4201
Fullerton CA 92634

Phone: (714) 441-2022

Alternate to: Walt Brainerd

Jon Steidel
Cray Research Inc.
655F Lone Oak Drive
Eagan MN 55121

Email: jls@cray.com

Phone: (612) 683-5734
Fax: (612) 683-5307

Alternate to: Larry Rolison

Wai Ming Wong
IBM Canada, Ltd.
(3T/123)
1150 Eglinton Ave. East
North York Ontario M3C 1H7
CANADA

Email: wmwong@vnet.ibm.com

Phone: (416) 448-3105
Fax: (416) 448-4414

Alternate to: Henry Zongaro

OBSERVERS

Bor Chan
NERSC
Lawrence Livermore National Lab.
University of California
P. O. Box 5509
L-560
Livermore CA 94550

Email: chan1@llnl.gov

Phone: (415) 422-4017

L. M. Delves
N.A. Software Ltd.
Roscoe House
62 Roscoe Street
Liverpool L1 9DW
ENGLAND

Email: l.delves@liverpool.ac.uk

David Mattoon
1547 North Sheridan Road
Lake Forest IL 60045

Email: dmattoon@ix.netcom.com

Phone: (312) 567-4716

Ivor R. Philips
The Boeing Company
P.O. Box 3707
#MS 71_22
Seattle WA 98124-2207

Email: ivor.r.philips@boeing.com

Phone: (206) 865-3522

 Michael Ross
 Intel Corp.
 JF3-363
 2111 NE 25th Ave
 Hillsboro OR 97124-7902

Email:
michael_ross@jf.ccm.intel.com

Phone: (503) 264-0567
 Fax: (503) 264 -7902

 Hideo Wada
 Research and Planning Division
 IT Strategy and Planning Group
 Fujitsu Limited
 1015 Kamikodanaka
 Nakahara-ku Kawasaki 211
 JAPAN

Email: wada@lp.nm.fujitsu.co.jp

Phone: 81 44-754-3200
 Fax: 81 44-751-9220

 OMC Secretary
 ITIC
 Suite 200
 1250 Eye Street NW
 Washington D.C. 20005

Email: x3sec@itic.nw.dc.us

Phone: (202) 626-5740
 Fax: (202) 628-2829

 LIAISONS

Miles Ellis
 Director:
 Educational Technology Resources
 Centre
 University of Oxford
 37-41 Wellington Square
 Oxford OX1 2JF
 ENGLAND

Email: Miles.Ellis@etrc.ox.ac.uk

Phone: +44 1865 270528
 Fax: +44 1865 270527

[WG5 Convenor]

 Jeffrey Fried
 Informix, Inc.
 4100 Bohannon Drive
 Menlo Park CA 94025

Email: jfried@informix.com

Phone: (415) 926-6893

Liaison from: X3H2 Database

 Michael Hennecke
 University of Karlsruhe
 Computing Center (G20.21 R210)
 Zirkel 2
 P.O. Box 69 80
 Karlsruhe D-76128
 GERMANY

Email: hennecke@rz.uni-karlsruhe.de

Phone: 49 721 608-4862
 Fax: 49 721 32550

[C Interoperability]

 Rochelle Lauer
 Director High Energy Physics
 Computing Facility
 Yale University, Physics
 Department
 512 Gibbs Lab
 260 Whitney Avenue
 P. O. Box 208121
 New Haven CT 06520-8121

Email:
lauer@yalph2.physics.yale.edu

Phone: (203) 432-3366
 Fax: (203) 432-6125

Liaison from: DECUS

 Hiroshi Matsuo
 Software Works
 Hitachi Ltd.
 5030 Totsuka-cho Totsuka-ku
 Yokohama-shi 244
 JAPAN

Phone: 011 81 45 824-2311

Liaison from: WG5/Japan

 J. Steve Morgan
 The University of Liverpool
 P.O. Box 147
 Liverpool L69 3BX
 ENGLAND

Email: j.s.morgan@liverpool.ac.uk

Phone: 44 (151) 794-3746
 Fax: 44 (151) 794-3759

[Parameterized Derived Types]

 David T. Muxworthy
 EUCS
 JCMB
 King's Buildings
 Edinburgh EH9 3JZ
 SCOTLAND

Email: d.muxworthy@ed.ac.uk

Phone: 44 (131) 650-3305
 Fax: 44 (131) 650-6552

Liaison from: BSI

 Karl-Heinz Rotthaeuser
 GMD/18
 Postfach 1316
 Forschungszentrum
 Informationstechnik
 Schloss Birlinghoven
 D-53754
 St. Augustin
 GERMANY

Email: rotthaeuser@gmd.de

Phone: 49 (2241) 14-3228

Fax: 49 (2241) 14-3003

Liaison from: WG5/Germany

Ron Silletti
IBM Corporation
500 Columbus Avenue
Thornwood NY 10594

Email: rsilletti@vnet.ibm.com

Liaison from: OMC

UNOFFICIAL OBSERVERS

Joanne Brixius
Cray Research Inc.
655F Lone Oak Dr.
Eagan MN 55121

Email: jbrixius@cray.com

Phone: (612) 683-5873

James T. Himer
16 Shawfield Way S.W.
Calgary Alberta T2Y 2X9
CANADA

Email: himerj@cuug.ab.ca

Phone: (403) 237-4215

Fax: (403) 232-5730

David R. Levine
Hewlett-Packard Company
MS CHR-02-DC
Massachusetts Language Lab.
300 Apollo Drive
Chelmsford MA 01824

Email: drlevine@apollo.hp.com

Phone: (508) 436-4015

Fax: (508) 436-5135

Alternate to: Richard Bleikamp

Linda O'Gara

Microsoft
One Microsoft Way
Redmond WA 98052

Email: lindaog@microsoft.com

Phone: (206) 936-6575

Fax: (206) 936-7329

John K. Reid
Atlas Centre
Rutherford Appleton Laboratory
Oxon OX11 0QX
ENGLAND

Email: jkr@letterbox.rl.ac.uk

Phone: 44 (1235) 44 6493

Fax: 44 (1235) 44 6626

[Exception Handling]

Janice Shepherd
IBM
T. J. Watson Research Center
P.O. Box 218
Yorktown Heights NY 10598

Email: janshep@watson.ibm.com

Phone: (914) 945-4366
