RESOLUTIONS OF THE WG5 MEETING ON 8 TO 12 AUGUST 1994
IN EDINBURGH, SCOTLAND, UK

All resolutions were passed by unanimous consent, other than resolution E14, which passed after a roll-call vote. The vote is shown following the text of resolution E14.

E1. Convenorship of WG5
That WG5, in order to ensure timely continuation of Fortran development, requests SC22 to appoint Jeanne Martin as interim Convenor and to encourage the US Member Body to propose a successor as soon as possible.

That WG5 welcomes the publication of the Russian language version of ISO 1539:1991 and congratulates Alla Gorelik and Svetlana Drobishevič on translating the standard, and thanks Jerry Wagener for his role in facilitating the work.

Further, that WG5 welcomes the publication of the Japanese national standard JIS X3001-1994 and congratulates the Japanese Industrial Standards Committee on completing this work.

E3. Industrial Real Time Fortran (ISO 7846:1985)
That WG5 recommends to SC22 that the standard for Industrial Real Time Fortran (ISO7846:1985) be withdrawn.

E4. Appointment of Defect Editor for Fortran
That WG5 requests SC22 to appoint Janice Shepherd to be Defect Editor for Fortran.

E5. Appointment of Editor for Repository of Suggested Requirements
That WG5 appoints John Reid to be the editor of the repository of suggested requirements for future revisions of the Fortran standard (WG5 Standing Document 5).

E6. Strategic Plan for Fortran Standardization
That WG5 reaffirms the Strategic Plan for Fortran Standardization (WG5N1046).

E7. WG5 Management Committee
That WG5 re-appoints the management committee defined in the Strategic Plan for Fortran Standardization consisting of a representative from the Canadian, German, Japanese, UK and US member bodies and the primary development body.

E8. ISO 9000 Procedures
That WG5 establishes a subgroup to investigate whether WG5 should adopt procedures based on ISO 9000. Those invited to take part in the subgroup are: Fred Hopper (convenor), Jeanne Martin, Jerry Wagener. It is to report to the WG5 convenor by August 31, 1995. Kurt Hirchert is requested to establish an e-mail reflector for the subgroup.

E9. Varying Length Character Strings in Fortran—Processing of DIS 1539-2
That WG5 approves the minor changes to ISO/IEC DIS 1539-2:1994(E) which have been made in response to the comments (WG5N1011) returned with the successful DIS ballot and which are reported in the Disposition of Comments Report (WG5-N1036r), and appoints Jeanne Martin, John Reid and David Muxworthy to review the final draft and to submit it before October 6, 1994 to ITTF for publication as an International Standard.
E10. Technical Corrigendum 2
That WG5 approves Technical Corrigendum 2 (WG5-N1018 with the corrections detailed in WG5-N1051) for forwarding to the SC22 Secretariat for processing as the second JTC1 Technical Corrigendum for Fortran.

E11. Technical Corrigendum 3
That WG5 requests X3J3 to proceed with maintenance work in developing responses to the remaining defect items; a decision on publication of a third technical corrigendum will be made at the April 1995 WG5 meeting.

E12. Collateral Standard on IEC 559 Arithmetic
That WG5 notes the recommendation from X3J3 (WG5-N966), regarding support for IEC 559 (requirement C4 in Berchtesgaden resolution B9), that this functionality be provided by a collateral standard rather than by features intrinsic to the language. In view of the ENABLE requirement being considered for Fortran 95, WG5 considers additional IEC 559 support to be less imperative than before and records its intent to defer action on this recommendation until a future WG5 meeting.

E13. Deferred Requirements
That WG5 accepts the recommendations from X3J3 that parameterized derived types, object-oriented programming and derived type input/output (respectively items C2, C6 and C7 in Berchtesgaden resolution B9) not be requirements for the 1995 revision of Fortran.

E14. Content of the 1995 Revision
That WG5 requires that the technical content of the next revision of Fortran include:
• the approved items in the Defect Index, with any corrections thereto,
• the approved items in document WG5N995, that is:
  MAXLOC & MINLOC enhancements,
  NAMELIST comments,
  minimal field widths,
  FORALL,
  PURE procedures,
  object initialization,
  removal of conflicts with IEC 559,
  CPU_TIME,
  nested WHERE,
  user-defined functions in specifications,
  with any corrections thereto,
• the following additional items:
  language evolution items (WG5N1048)
  ENABLE construct (WG5-N1042),
  allocatable arrays as structure components (WG5N1040),
  optional generic-spec on END INTERFACE (WG5N1017).
If the technical work for any item cannot be completed in the time established for submitting the CD, WG5 requests X3J3 to contact the WG5 convenor at the earliest opportunity for resolution of the situation by the WG5 management committee.

Individual vote: 21 yes - 2 no - 1 abstain
Country vote: 6 yes - 0 no - 0 abstain

E15. Extent of the 2000 Revision
That WG5 reconfirms its intent, as stated in Victoria Resolution V9 and the Strategic Plan for Fortran Standardization, that the 2000 revision of Fortran will be a major revision.
E16. Direction of the 2000 Revision
That WG5 intends that the highest priority for Fortran in the foreseeable future is to maintain leadership in scientific and engineering computing, where performance is significant; those specific requirements that support this objective are the most important.

Otherwise, for a general-purpose language the areas of object-oriented programming and interoperability with non-Fortran environments are important and should be investigated for future versions of Fortran.

WG5 will actively investigate whether object-oriented programming should be the direction the 2000 revision should take and to this end appoints the following subgroup to report to the WG5 convenor, by January 31, 1995, to provide information on which such a decision could be based. Those invited to take part in the subgroup are: Malcolm Cohen, Fred Hopper, Ralph Johnson, David Levine, Jeanne Martin, Lawrie Schonfelder, Jamie Shiers (convenor).

WG5 will actively investigate the most pressing needs for interoperability and to this end appoints the following subgroup to report to the WG5 convenor, by January 31, 1995, the recommended list of such needs. Those invited to take part in the subgroup are: Keith Bierman, Peter Griffiths, Linda O’Gara (convenor), Jamie Shiers.

Kurt Hirchert is requested to establish email reflectors for both subgroups.

A third level of need is refinement of the current version of the Fortran standard in numerous areas, such as completing development of exception handling, completing data abstraction capability, improving language regularity, adding appropriate new data types, and enhancing input/output. It is expected that the 2000 version of the Fortran standard will contain a number of specific refinements or extensions that will be more completely specified at the next two WG5 meetings, in response to user requirements.

E17. Appreciation of Technical Contributions
That WG5 records its thanks to X3J3 for work on maintenance of the international Fortran standard and development of the proposed revised standard, to Lawrie Schonfelder for development of the Varying Length String Module, to John Reid for editing Technical Corrigendum 2 and to the British and German member bodies for their contributions to development.

E18. Vote of Thanks for Support
That WG5 thanks the following organizations for generously supporting the meeting: Scottish Power, Salford Software, NAG, Edinburgh Portable Compilers, Edinburgh University.

E19. Vote of Thanks
That WG5 wishes to express its appreciation to the Convenor (Jeanne Martin), the vice chair (Bert Buckley), the secretary (Mike Roth), the librarian (Fred Hopper), the drafting committee, the host (David Muxworthy on behalf of British Standards Institution) and all the local organizers (particularly Jane Bannon and Graham Barber) for their contributions to the success of the meeting.