Date: Thursday, June 01, 2000
To: WG5
From: Tony Warnock, J3 Chair
Subject: Fortran 2000 Status Report

- J3 has continued working on the standard.
- As requested by WG5, J3 is devoting resources towards interpretation processing.
- As requested by WG5, J3 will implement dynamic type allocations, a generalized constructor, an implicit root type, and the WITH-like construct.
- Current resource processing: 1/3 effort on interpretation processing, 1/3 effort on OOP, and 1/3 effort on interoperability with C.
- J3 has both gained and lost members this year. While the total number of members is about the same, the expertise of the retiring members will be missed.

Fortran 2000 Workplan Status Report

The base for Fortran 2000 is Fortran 95. J3 will integrate the material the following "R" and "T" items (and any "M" items that are finished in time) into the Fortran 95 standard to prepare the Fortran 2000 draft standard. J3 will deliver this draft document to WG5 in 2003.

Requirements

R1	Derived-Type I/O	Complete
R2	Asynchronous I/O	Complete
R3	Procedure Pointers	Complete
R4	Interval Arithmetic Enabling Technologies	Discontinued
b	Additions to Character Set	Complete
f	Constants for Opaque Types	Complete
R5	Parameterized Derived Types	Complete
R6	Object Oriented Technologies	
a	Inheritance	Complete
b	Polymorphism	Complete
c	Implicit Root Type	Complete
d	WITH-like Construct	In Progress
R7	Generalized Constructors/Destructors	In Progress
R8	Internationalization	Complete
R9	Interoperability with C	In Progress

Minor Technical Enhancements

B1	VOLATILE Attribute	Complete
B2	Allow PUBLIC Entities of PRIVATE Type	Complete
B3	Mixed PUBLIC and PRIVATE Type Components	Complete
B4	Stream I/O	Complete
B5	Command Line Arguments and Environment Variables	
a	Command-Line Arguments	Complete
b	Environment Variables	Complete
B6	Access to Status Error Messages	Complete
B7	Control of I/O Rounding	Complete
M1	Increased Statement Length	Complete
M2	Intent for Pointer Arguments	Complete
M3	Generic RATE_COUNT in SYSTEM CLOCK	Complete

M4	Specifying Pointer Lower Bounds	Complete
M5	Extend MAX/MIN Intrinsics to CHARACTER	Complete
M6	Extended Initialization Expressions	Complete
M7	Lower Case Syntax Elements	Complete
M10	Named Scratch Files	Complete
M15	Renaming Defined Operators	Complete
M16	Derived-Type Assignment Fix	Interpretation
M17	Enhanced Complex Constants	Complete
M21	Flexible Optimization Control	Discontinued
M22	Control of Operation Rounding	Discontinued
M26	Dynamic Type Allocation	Complete
M27	Access Standard Unit Numbers	Complete
M28	IMPORT Statement	Complete

Technical Reports from Bodies other than J3

T1	Floating Point Exception Handling	TR15580
T3	Allocatable Structure Components	TR15581

Optional Parts of the Fortran Family of Standards

Varying String Data Type	Standard/Approved
Conditional Compilation	Standard/Approved

Interpretations

The following interpretations have been considered by J3.

J3	Letter	Number	Title
Pass	????	00066	Errors in processing data transfer statements
Pass	Pass	00067	Writing zeros
Pass	Pass	00068	Asterisks as I/O units
Pass	Pass	00069	What is a numeric character?
Pass	Pass	00070	Asymmetry between constant specification and initialization expressions
Pass	Pass	00071	Character array constructors
Pass	Pass	00072	Resolving generic procedure references
Pass	Pass	00076	INTENT(IN) dummy arguments and implied DO loops
Pass	Pass	00077	INTENT(IN) dummy arguments and NULLIFY
Pass	Pass	00079	Pointer Assignment and Allocatable Arrays
Pass	Pass	00080	Host association and the EXTERNAL attribute
Pass	Pass	00082	Usage of BOZ literal constants
Pass	Pass	00083	Scope of array-constructor implied-DO variable
Pass	Pass	00084	Events that cause variables to be defined