## Foreword

- 1 This document revises the version dated 29 September 1997 by incorporating the substantive changes approved by ISO WG21 and ANSI<sup>†</sup> X3J16 at their joint meeting in Morristown, New Jersey, USA in November, 1997. That version also incorporates changes that were discussed and tentatively made at the meetings in Nashua, New Hampshire, USA, in March, 1997, and in London, UK, in July, 1997, so this document includes all of those changes that were not rescinded in Morristown. A variation on this document that will be produced with formatting changes as needed to conform to ISO requirements will be submitted to ISO SC22 for approval as the Final Draft International Standard (FDIS) for C++.
- 2 The C++ programming language as described in this Working Paper is based on the language as described in Chapter R (Reference Manual) of Stroustrup: *The C++ Programming Language* (second edition, Addison-Wesley Publishing Company, ISBN 0–201–53992–6, copyright © 1991 AT&T). That, in turn, is based on the C programming language as described in Appendix A of Kernighan and Ritchie: *The C Programming Language* (Prentice-Hall, 1978, ISBN 0–13–110163–3, copyright © 1978 AT&T). In addition, portions of this Working Paper are based on work by P.J. Plauger, which was published as *The Draft Standard C++ Library*; Prentice-Hall, ISBN 0–13–117003–1, copyright © 1995 P.J. Plauger). All rights in these originals are reserved.
- 3 The C language changed substantially after *The C Programming Language* was published. Those changes are reflected in ISO/IEC 9899:1990, *C Standard* which, together with Chapter R of *The C++ Programming Language*, serve as the two base documents for this Working Paper.
- 4 Most clause and subclause titles have text in square brackets at the end of their respective lines. The bracketed text is a *symbolic name* for that clause or subclause, with the idea that the symbolic name will remain constant even if the corresponding number changes in subsequent drafts. These symbolic names are there for convenience only and are not part of the text; they might not appear in the final version of the International Standard.

## Box 0

Text that appears within a rectangular box that has a label of the form **Box** n in its upper left corner, where n represents a natural number, is there for convenience only and is not part of the text; such boxes will not appear in the final version of the International Standard.

A vertical bar in the right margin shows text that is new or changed from the version distributed before the Morristown meeting; an asterisk there shows where text was deleted. These "change bars" were mechnically prepared in a way that is sometimes too conservative: It is possible that text is shown as changed that did not actually change. However, the method of preparation is intended to ensure that a change bar does indeed indicate every change.

<sup>†</sup> American National Standards Institute