

Bibliography of Numbered SNOBOL4 Documents

Compiled by Ralph E. Griswold

Starting in 1967, documents produced in conjunction with SNOBOL4 language development have been assigned identifying codes. These documents are referred to in SNOBOL4 publications as “numbered documents”.

There are six series of documents, each identified by a different prefix. Within a series, ascension numbers identify distinct documents. Letter suffixes, in alphabetic ascension, identify different versions of a document. (This scheme has not always been strictly followed; there are exceptions, especially among early documents.) The series are:

prefix	series
S4B	Information Bulletins
S4D	Project Documents
S4N	Installation Notes
S4PC	Program Corrections
S4PD	Program Descriptions
S4PL	Program Listings

Documents in this bibliography are arranged alphabetically by prefix. Within each prefix classification, the documents are arranged in ascending numerical order.

In preparing this bibliography, certain conventions have been followed to provide uniformity. Author's names are given last name first, followed by initials. The same form has been used for all occurrences of a name, even if the form given on separate documents is different. Square brackets ([]) enclose information that is known to be correct, but which does not appear on the document itself. Information that is believed to be correct, but for which the document itself is not available, is enclosed in braces ({ }).

Most numbered SNOBOL4 documents are now out of print. Their status is indicated by codes opposite the document numbers as follows:

- Out of print: copies are no longer available
- Z Limited number in stock: copies available until stock is exhausted
- Open stock: copies available for foreseeable future

Copies of available documents are provided free of charge. Send requests to

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SNOBOL4 Information Bulletins

- S4B1 ● *SNOBOLA Information Bulletin*. Griswold, R. E., Poage, J. F., and Polonsky, I. P. Bell Labs, Holmdel, New Jersey. August 9, 1968. 2 pages. Information bulletin distributed to addressees on SNOBOL4 mailing list maintained at Bell Labs. Announced availability of Version 1, Release 3 of SNOBOL4 and forthcoming publication of SNOBOL4 language manual. Included questionnaire to be returned to update mailing list.
- S4B2 ● *SNOBOLA Information Bulletin*. Griswold, R. E., Poage, J. F., and Polonsky, I. P. Bell Labs, Holmdel, New Jersey. March 1, 1969. 4 pages. Information bulletin distributed to addressees on SNOBOL4 mailing list maintained at Bell Labs. Announced availability of Version 2 SNOBOL4 language manual, availability of S4D10, projected plans for SNOBOL4 implementation book. Listed existing and planned implementations of Version 2.0. Published results of S4B1 concerning applications.
- S4B2a ● *SNOBOLA Information Bulletin*. Griswold, R. E., Poage, J. F., and Polonsky, I. P. Bell Labs, Holmdel, New Jersey. March 1, 1969. 4 pages. Same as S4B2, but adapted for addressees outside the United States.
- S4B2b ● *SNOBOLA Information Bulletin*. Griswold, R. E., Poage, J. F., and Polonsky, I. P. Bell Labs, Holmdel, New Jersey. March 1, 1969. 4 pages. Same as S4B2a, but adapted for addressees in Canada.
- S4B3 ● *SNOBOLA Information Bulletin*. Griswold, R. E., Poage, J. F., and Polonsky, I. P. Bell Labs, Holmdel, New Jersey. July 15, 1969. 5 pages. Information bulletin distributed to addressees on SNOBOL4 mailing list maintained at Bell Labs. Announced SNOBOL4B, publication of SNOBOL4 language manual, availability of S4D8, S4D10a, S4D11a, correction of Version 2.0, development of Version 3.0, and SNOBOL4 subset project. Included checklist of SNOBOL4 Project Documents and form to request publications.
- S4B4 ● *SNOBOLA Information Bulletin*. Griswold, R. E., Poage, J. F., and Polonsky, I. P. Bell Labs, Holmdel, New Jersey. December 15, 1969. 6 pages. Information bulletin distributed to addressees on SNOBOL4 mailing list maintained at Bell Labs. Announced Version 3. Listed implementations of Version 2, plans for Version 3 implementations, SPITBOL, and other implementations of SNOBOL4. Mailed with copies of S4D12 and S4D14. Announced forthcoming publication of revised SNOBOL4 language manual. Included questionnaire.
- S4B5 ● *SNOBOLA Information Bulletin*. Griswold, R. E. Bell Labs, Holmdel, New Jersey. November 14, 1970. 7 pages. Information bulletin distributed to addressees on SNOBOL4 mailing list maintained at Bell Labs. Announced forthcoming second edition of language manual. Described present status of SNOBOL4 including Version 3.4, available implementations for various computers and SPITBOL. Included results of questionnaire sent with S4B4 concerning user profile and applications.
- S4B6 ● *SNOBOLA Information Bulletin*. Griswold, R. E. Bell Labs, Holmdel, New Jersey. March 1, 1971. 2 pages. Information bulletin distributed to addressees on SNOBOL4 mailing list maintained at Bell Labs. Announced availability of SPITBOL, second edition of the SNOBOL4 language manual, and projected SNOBOL4 primer.
- S4B7 ● *SNOBOLA Information Bulletin*. [Griswold, R. E.] [Bell Labs, Holmdel, New Jersey]. August 20, 1971. 5 pages. Information bulletin distributed to addressees on SNOBOL4 mailing list maintained at Bell Labs. Listed existing implementations of SNOBOL4, availability of S4D18a, forthcoming publication of implementation book, SIGPLAN's proposal for language interest groups, and inactive status of SNOBOL4 language development.
- S4B8 ● *SNOBOLA Information Bulletin*. [Griswold, R. E.] The University of Arizona. October 2, 1972. 5 pages. Information bulletin distributed to addressees on SNOBOL4 mailing list maintained at Bell Labs. Announced initiation of SNOBOL History Project. Listed

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implementations of SNOBOL4 including FASBOL and SITBOL. Announced publication of SNOBOL4 implementation book, forthcoming publication of SNOBOL4 primer, projected book *Algorithms in SNOBOL4*, and string and list processing book.

- S4B9 ● *SNOBOL4 Information Bulletin*. Griswold, R. E. The University of Arizona. May 10, 1973. 5 pages. Information bulletin distributed to addressees on SNOBOL4 mailing list maintained at the University of Arizona. Clarified status of the SNOBOL4 Information Bulletin. Listed implementations of SNOBOL4. Described status of SNOBOL History Project and requested contributions. Discussed possible standardization of SNOBOL4 extensions. Mentioned NSF grant for research related to SNOBOL4. Listed recent publications.
- S4B10 ● *SNOBOL4 Information Bulletin*. Griswold, R. E. The University of Arizona. December 1, 1973. 7 pages. Information bulletin distributed to addressees on SNOBOL4 mailing list maintained at the University of Arizona. Announced SNOBOL panel session for 74 NCC. Described status of SNOBOL History Project. Continued discussion of standardization begun in S4B9. Listed status of implementations. Listed recent publications and availability of SNOBOL4 Project Documents from Bell Labs. Offered possibility of SNOBOL4 program library. Included questionnaire.
- S4B11 ● *SNOBOL4 Information Bulletin*. Griswold, R. E. The University of Arizona. April 15, 1974. 5 pages. Information bulletin distributed to addressees on SNOBOL4 mailing list maintained at the University of Arizona. Listed session pane lists for 74 NCC. Listed status of implementations. Listed recent publications. Announced the availability of experimental modifications to the macro implementation of SNOBOL4. Summarized responses from S4B10 questionnaire.
- S4B12 ● *SNOBOL4 Information Bulletin*. Griswold, R. E. The University of Arizona. September 30, 1974. 5 pages. Information bulletin distributed to addressees on SNOBOL4 mailing list maintained at the University of Arizona. Listed policy on distribution of SNOBOL4 Information Bulletins, news of implementations, change in Bell Labs' policy on distribution of SNOBOL4 material. Announced recent publications, documents in progress, and the performance monitoring project.
- S4B13 ● *SNOBOL4 Information Bulletin*. Griswold, R. E. The University of Arizona. February 27, 1975. 4 pages. Information bulletin distributed to addressees on SNOBOL4 mailing list maintained at the University of Arizona. Listed news of implementations, SIL distribution policy, and recent publications. Described status of SNOBOL History Project. Announced SIL benchmarking project.
- S4B14 ● *SNOBOL4 Information Bulletin*. Griswold, R. E. The University of Arizona. June 11, 1975. 3 pages. Information bulletin distributed to addressees on SNOBOL4 mailing list maintained at the University of Arizona. Listed news of implementations, proposed program library, and new publications.
- S4B15 ● *SNOBOL4 Information Bulletin*. Griswold, R. E. The University of Arizona. October 6, 1975. 3 pages. Information bulletin distributed to addressees on SNOBOL4 mailing list maintained at the University of Arizona. Listed news of implementations, distribution information on SNOBOL4 material, requested return of loaned tapes, listed new publications, announced SL5 project, and suspension of some SNOBOL4 projects.
- S4B16 ● *SNOBOL4 Information Bulletin*. Griswold, R. E. The University of Arizona. March 1, 1976. 3 pages. Information bulletin distributed to addressees on SNOBOL4 mailing list maintained at the University of Arizona. Announced reader survey and mailing list update. Listed implementation news and new publications.
- S4B17 ● *SNOBOL4 Information Bulletin*. Griswold, R. E. The University of Arizona. July 28, 1976. 5 pages. Information bulletin distributed to addressees on SNOBOL4 mailing list

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maintained at the University of Arizona. Listed results of survey from S4B16. Listed information about SITBOL, SPITBOL, and new implementations. Announced new distribution policy for SNOBOL4 material. Listed new publications.

- S4B18 z *SNOBOL4 Information Bulletin*. Griswold, R. E. The University of Arizona. April 16, 1977. 4 pages. Information bulletin distributed to addressees on SNOBOL4 mailing list maintained at the University of Arizona. Announced SPITBOL news and new SIL implementations. Listed new publications.
- S4B19 ● *SNOBOL4 Information Bulletin*. Griswold, R. E. The University of Arizona. September 7, 1977. 2 pages. Information bulletin distributed to addressees on SNOBOL4 mailing list maintained at the University of Arizona. Listed implementation news and proposed SNOBOL conference.
- S4B20 ● *SNOBOL4 Information Bulletin*. Griswold, R. E. The University of Arizona. January 7, 1978. 2 pages. Information bulletin distributed to addressees on SNOBOL4 mailing list maintained at the University of Arizona. Announced History of Programming Languages Conference. Listed news on implementations.
- S4B21 ● *SNOBOL4 Information Bulletin*. Griswold, R. E. The University of Arizona. December 31, 1978. 2 pages. Information bulletin distributed to addressees on SNOBOL4 mailing list maintained at the University of Arizona. Listed implementation news, proposed SNOBOL4 users group, reported on History of Programming Languages Conference, announced availability of SNOBOL bibliography. Announced SL5.
- S4B22 z *SNOBOL4 Information Bulletin*. Griswold, R. E. The University of Arizona. December 27, 1979. 4 pages. Information bulletin distributed to addressees on SNOBOL4 mailing list maintained at the University of Arizona. Included questionnaire, reviewed status of SNOBOL4, MACRO SPITBOL, and Cal SNOBOL. Listed recent work on SIL implementations. Announced availability of publications.
- S4B23 z *SNOBOL4 Information Bulletin*. Griswold, R. E. The University of Arizona. June 9, 1980. 4 pages. Information bulletin distributed to addressees on SNOBOL4 mailing list maintained at the University of Arizona. Reported status of SPITBOL/360 and SPITBOL/370, announced availability of MACRO SPITBOL for the VAX 11/780 and Version 5 of SITBOL. Listed error in SIL Version 3.11 source. Announced availability of publications. Reported results of questionnaire in S4B22.
- S4B24 z *SNOBOL4 Information Bulletin*. Griswold, R. E. The University of Arizona. December 31, 1980. 4 pages. Information bulletin distributed to addressees on SNOBOL4 mailing list maintained at the University of Arizona. Reported status of SIL implementations of SNOBOL4, availability of SNOBOL4 Project Documents. Discussed relation of SNOBOL4 and Icon. Requested material for the SNOBOL archives. Document request form attached.
- S4B25 z *SNOBOL4 Information Bulletin*. Griswold, R. E. The University of Arizona. December 18, 1981. 3 pages. Information bulletin distributed to addressees on SNOBOL4 mailing list maintained at the University of Arizona. Reported status of implementations of SNOBOL4, SNOBOL4 library tape, applications, self-reproducing programs, availability of SNOBOL4 Project Documents. Document request form attached.
- S4B26 z *SNOBOL4 Information Bulletin*. Griswold, R. E. The University of Arizona. December 28, 1982. 5 pages. Information bulletin distributed to addressees on SNOBOL4 mailing list maintained at the University of Arizona. Reported status of implementations of SNOBOL4, self-reproducing programs, publications. Document request form attached.
- S4B27 z *SNOBOL4 Information Bulletin*. Griswold, R. E. The University of Arizona. February 13, 1984. 5 pages. Information bulletin distributed to addressees on SNOBOL4 mailing list maintained at the University of Arizona. Announced availability of SNOBOL4 for

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the IBM PC, new MACRO SPITBOL and SIL implementations, revision of SNOBOL bibliography. Order forms for Minnesota SNOBOL4 and PC MACRO SPITBOL attached.

- S4B28 z *SNOBOL4 Information Bulletin*. Griswold, R. E. The University of Arizona. May 23, 1984. 8 pages. Information bulletin distributed to addressees on SNOBOL4 mailing list maintained at the University of Arizona. Announced availability of SNOBOL4+ for the IBM PC, SPITBOL 370, new documents. Order forms for SNOBOL4+ and SPITBOL 370 attached, along with document request form.
- S4B29 z *SNOBOL4 Information Bulletin*. Griswold, R. E. The University of Arizona. April 18, 1985. 6 pages. Information bulletin distributed to addressees on SNOBOL4 mailing list maintained at the University of Arizona. Updated information on PC implementations of SNOBOL4. Mentioned possible Motorola 68000 implementation. Announced Dakota State Conference. Described Rebus. Flyers for Minnesota SNOBOL4 and SNOBOL4+, as well as request form for Rebus attached.

SNOBOL4 Project Documents

- S4D1 ● *Preliminary Description of the SNOBOL4 Programming Language*. Griswold, R. E., Poage, J. F., and Polonsky, I. P. Bell Labs, Holmdel, New Jersey. [May 1, 1967]. 32 pages. The first published description of SNOBOL4. Describes differences between SNOBOL3 and SNOBOL4 and new features of SNOBOL4. Appendix includes six sample programs.
- S4D1a ● *Preliminary Description of the SNOBOL4 Programming Language*. Griswold, R. E., Poage, J. F., and Polonsky, I. P. Bell Labs, Holmdel, New Jersey. July 6, 1967. 32 pages. Minor revision of S4D1.
- S4D2 ● *SNOBOL4 Language Features, Input and Output*. [Griswold, R. E.] [Bell Labs, Holmdel, New Jersey]. August 10, 1967. 3 pages. Description of input and output facilities in SNOBOL4.
- S4D2a ● *SNOBOL4 Language Features, Input and Output*. [Griswold, R. E.] [Bell Labs, Holmdel, New Jersey]. August 10, 1967. 3 pages. Minor revision of S4D2.
- S4D3 ● *Keywords*. [Griswold, R. E.] [Bell Labs, Holmdel, New Jersey]. No date. 3 pages. Describes keywords in SNOBOL4.
- S4D4 ● *Preliminary Report on the SNOBOL4 Programming Language, II*. Griswold, R. E., Poage, J. F., and Polonsky, I. P. Bell Labs, Holmdel, New Jersey. October 20, 1967. 83 pages. Major revision of S4D1. Description of SNOBOL4 based on knowledge of SNOBOL3, but describing new features. Appendices include list of functions and twelve sample programs.
- S4D4a ● *Preliminary Report on the SNOBOL4 Programming Language, II*. Griswold, R. E., Poage, J. F., and Polonsky, I. P. Bell Labs, Holmdel, New Jersey. November 22, 1967. 89 pages. Minor revision of S4D4.
- S4D4b ● *Preliminary Report on the SNOBOL4 Programming Language, II*. Griswold, R. E., Poage, J. F., and Polonsky, I. P. Bell Labs, Holmdel, New Jersey. March 20, 1968. 89 pages. Revision of S4D4a. Describes Version 1 of SNOBOL4.
- S4D5 ● *JCL for SNOBOL4*. [Griswold, R. E.] [Bell Labs, Holmdel, New Jersey]. No date. 3 pages. Installation information for the IBM 360 implementation of SNOBOL4.
- S4D5a ● *JCL for SNOBOL4*. [Griswold, R. E.] [Bell Labs, Holmdel, New Jersey]. No date. 3 pages. Minor revision of S4D5.
- S4D5b ● *Version 1 of SNOBOL4*. [Griswold, R. E.] [Bell Labs, Holmdel, New Jersey]. No date. 4 pages. Revision and expansion of S4D5a to accompany IBM 360 implementation of Version 1 of SNOBOL4.
- S4D5c ● *Version 1 of SNOBOL4*. [Griswold, R. E.] [Bell Labs, Holmdel, New Jersey]. No date. 10 pages. Revision of S4D5b to accompany Version 1, Release 2 of SNOBOL4. Includes list of errors corrected in previous release.
- S4D5d ● *Version 1 of SNOBOL4*. [Griswold, R. E.] [Bell Labs, Holmdel, New Jersey]. No date. 14 pages. Revision of S4D5c to accompany Version 1, Release 3 of SNOBOL4.
- S4D5e ● *Version 2.0 of SNOBOL4*. [Griswold, R. E.] [Bell Labs, Holmdel, New Jersey]. No date. 13 pages. Revision of S4D5d to accompany Version 2.0 of SNOBOL4. Includes list of new features and errors in previous releases.
- S4D5f ● *Version 3 of SNOBOL4*. [Griswold, R. E.] [Bell Labs, Holmdel, New Jersey]. December 15, 1969. 9 pages. Revision of S4D5e to accompany Version 3.0 of SNOBOL4. Describes new language features, provides installation information and lists errors in previous releases. Mailed with copy of S4D14.

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- S4D7 ● *{Tracing Facilities for SNOBOL4}*. Dickman, B.N. and Jensen, P.D. {Bell Labs, Holmdel, New Jersey}. Describes tracing facilities for SNOBOL4.
- S4D7a ● *Tracing Facilities for SNOBOL4*. Dickman, B.N. and Jensen, P.D. Bell Labs, Holmdel, New Jersey. March 27, 1968. 13 pages. Revision of S4D7.
- S4D8 ● *A Guide to the Macro Implementation of SNOBOL4*. Griswold, R. E. Bell Labs [Holmdel, New Jersey]. December 27, 1968. 177 pages. A description of the macro system used to implement SNOBOL4. Contains a brief overview of the approach to the implementation, list of syntax tables, and detailed instructions for implementing each macro.
- S4D8 ● *A Guide to the Macro Implementation of SNOBOL4*. Griswold, R. E. Bell Labs [Holmdel, New Jersey]. May 7, 1969. 180 pages. Minor revision of previous version of S4D8. No minor revision letter was assigned, although documents are different.
- S4D8a ● *A Guide to the Macro Implementation of SNOBOL4*. Griswold, R. E. Bell Labs [Holmdel, New Jersey]. July 28, 1969. 181 pages. Minor revision of S4D8.
- S4D8b ● *A Guide to the Macro Implementation of SNOBOL4*. Griswold, R. E. Bell Labs [Holmdel, New Jersey]. December 15, 1969. 173 pages. Revision of S4D8a, corresponding to Version 3.
- S4D8c ● *A Guide to the Macro Implementation of SNOBOL4*. Griswold, R. E. Bell Labs [Holmdel, New Jersey]. February 27, 1970. 175 pages. Minor revision of S4D8b.
- S4D8d ● *A Guide to the Macro Implementation of SNOBOL4*. Griswold, R. E. Bell Labs [Holmdel, New Jersey]. July 16, 1971. 177 pages. Minor revision of S4D8c.
- S4D8e ● *A Guide to the Macro Implementation of SNOBOL4*. Griswold, R. E. The University of Arizona. March 19, 1976. 127 pages. Minor revision of S4D8d.
- S4D8f ● *A Guide to the Macro Implementation of SNOBOL4*. Griswold, R. E. The University of Arizona. June 11, 1976. 104 pages. Minor revision of S4D8e.
- S4D9 ● *The SNOBOL4 Programming Language*. Griswold, R. E., Poage, J. F., and Polonsky, I. P. Bell Labs, Holmdel, New Jersey. August 8, 1968. 221 pages. The first complete, self-contained description of SNOBOL4. This document was the basis for the SNOBOL4 Programming Language, published by Prentice-Hall.
- S4D9a ● *The SNOBOL4 Programming Language*. Griswold, R. E., Poage, J. F., and Polonsky, I. P. Bell Labs, Holmdel, New Jersey. August 6, 1968. 221 pages. Minor revision of S4D9.
- S4D10 ● *External Functions for SNOBOL4*. Strauss, H.J. Bell Labs, Holmdel, New Jersey. October 10, 1968. 69 pages. A description of the external function facility in SNOBOL4 with specific reference to the IBM 360 implementation. Five sample programs, including code for external functions, are given in the appendix.
- S4D10a ● *External Functions for SNOBOL4*. Strauss, H.J. Bell Labs, Holmdel, New Jersey. May 5, 1969. 69 pages. Revision of S4D10 to correspond to Version 2.
- S4D10b ● *External Functions for SNOBOL4*. Strauss, H.J. Bell Labs, Holmdel, New Jersey. December 1, 1969. 69 pages. Revision of S4D10a to correspond to Version 3.
- S4D10c ● *External Functions for SNOBOL4*. Strauss, H.J. Bell Labs, Holmdel, New Jersey. July 31, 1970. 69 pages. Minor revision of S4D10b.
- S4D11a ● *A User Manual for BLOCKS*. Gimpel, J. F. Bell Labs, Holmdel, New Jersey. May 1, 1969. 53 pages. A description of SNOBOL4B, an extension of SNOBOL4 incorporating a 3-dimensional string data type called BLOCK. Appendices include

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sample programs.

- S4D11b ● *A User Manual for BLOCKS (version 1.2)*. Gimpel, J. F. Bell Labs, Holmdel, New Jersey. April 1, 1970. 56 pages. Revision of S4D11a to describe a new version of SNOBOL4B.
- S4D11b ● *A User Manual for BLOCKS (version 1.4)*. Gimpel, J. F. Bell Labs, Holmdel, New Jersey. June 1, 1970. 24 pages. Revision of earlier version of document of same name and number.
- S4D11c z *A User Manual for BLOCKS (version 1.4)*. Gimpel, J. F. Bell Labs, Holmdel, New Jersey. August 15, 1970. 34 pages. Revision of S4D11b.
- S4D12 ● *A Bibliography of SNOBOL Publications (excluding Bell Telephone Laboratories documents)*. Shapiro, M. D. Bell Labs, Holmdel, New Jersey. August 1, 1969. 9 pages. The first bibliography of SNOBOL. Includes two sections: (1) descriptions of SNOBOL or SNOBOL-like programs, and (2) applications of SNOBOL.
- S4D12a ● *A Bibliography of SNOBOL Publications (excluding Bell Telephone Laboratories documents)*. Shapiro, M. D. Bell Labs, Holmdel, New Jersey. August 1, 1970. 11 pages. Revision and expansion of S4D12.
- S4D12b ● *A Bibliography of SNOBOL Publications (excluding Bell Telephone Laboratories documents)*. Shapiro, M. D., revised by Hammer, M.T. Bell Labs, Holmdel, New Jersey. June 1, 1971. 15 pages. Revision and expansion of S4D12a.
- S4D13 ● *A Guide to the Implementation of SNOBOL4B*. Gimpel, J. F. Bell Labs [Holmdel, New Jersey]. August 11, 1969. 11 pages. Description of the macro implementation of SNOBOL4B. Includes description of additional macros needed, in style of S4D8d.
- S4D14 ● *Version 3 of SNOBOL4*. Griswold, R. E. Bell Labs, Holmdel, New Jersey. November 15, 1969. 40 pages. A description of Version 3 of SNOBOL4, assuming knowledge of Version 2. Appendix includes sample programs.
- S4D14a ● *Version 3 of SNOBOL4*. Griswold, R. E. Bell Labs, Holmdel, New Jersey. January 2, 1970. 42 pages. Minor revision of S4D14.
- S4D14b ● *Version 3 of SNOBOL4*. Griswold, R. E. Bell Labs, Holmdel, New Jersey. March 3, 1970. 35 pages. Minor revision of S4D14a.
- S4D15 ● *Macro Usage Tables for SNOBOL4*. Griswold, R. E. Bell Labs, Holmdel, New Jersey. January 1, 1970. 102 pages. Listing of location of occurrences of macros in Version 3.0 source listing, including digram and trigram combinations.
- S4D15a ● *Macro Usage Tables for SNOBOL4*. Griswold, R. E. Bell Labs, Holmdel, New Jersey. January 23, 1970. 51 pages. Revision of S4D15 to omit trigrams that occur only once.
- S4D15b ● *Macro Usage Tables for SNOBOL4*. Griswold, R. E. Bell Labs, Holmdel, New Jersey. August 5, 1970. 51 pages. Revision of S4D15a to correct errors in trigram sequence numbers.
- S4D16 ● *SNOBOL4 Address List*. [Griswold, R. E.] Bell Labs, Holmdel, New Jersey. July 13, 1970. 127 pages. SNOBOL4 address list as of December 15, 1969. Used to mail S4B4. List is alphabetized in two parts: domestic and foreign.
- S4D16a ● *SNOBOL4 Address Lists*. [Griswold, R. E.] July 9, 1971. 100 pages. Revision of S4D16 to bring list up to date. In three sections: (1) basic address list with domestic and foreign parts, (2) addresses of IBM 360 SNOBOL4 installations, and (3) SNOBOL4 implementors.

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- S4D16b ● *SNOBOLA Address List*. Griswold, R. E. (compiler) The University of Arizona. April 18, 1974. 9 pages. Recompilation of S4D16a to bring list up to date as a result of responses to questionnaire in S4B10.
- S4D16c ● *SNOBOLA Address List*. Griswold, R. E. (compiler) The University of Arizona. July 19, 1976. 17 pages. Recompilation of S4D16b to bring list up to date.
- S4D16d ○ *SNOBOLA Address List*. Griswold, R. E. (compiler) The University of Arizona. September, 1980. 20 pages. Recompilation of S4D16c to bring list up to date.
- S4D17 ● *SNOBOLA Macro Source for Version 3.0*. Griswold, R. E. Bell Labs, Holmdel, New Jersey. July 15, 1970. 122 pages. Source listing of the Version 3.0 macro implementation of SNOBOL4.
- S4D18 ● *Catalog of Bell Laboratories SNOBOLA Publications*. Shapiro, M. D. Bell Labs, Holmdel, New Jersey. July 31, 1970. 6 pages. Listing of numbered SNOBOL4 documents as of date of publication.
- S4D18a ● *Catalog of Bell Laboratories SNOBOLA Publications*. Shapiro, M. D., revised by Griswold, M. T. Bell Labs, Holmdel, New Jersey. August 27, 1971. 6 pages. Revision and updating of S4D18.
- S4D18b ● *Catalog of Bell Laboratories SNOBOLA Publications*. Shapiro, M. D., revised by Griswold, M. T. and Gimpel, J. F. Bell Labs, Holmdel, New Jersey. June 1, 1973. 10 pages. Updating of S4D18a.
- S4D19 ● *IBM 360 Subroutines for Version 3.0 of SNOBOLA*. Griswold, R. E. Bell Labs, Holmdel, New Jersey. July 16, 1970. 40 pages. Listing of the subroutines used in the IBM implementation of SNOBOL4.
- S4D19a ○ *IBM 360 Subroutines for Version 3 of SNOBOLA*. Griswold, R. E. The University of Arizona. October, 1980. 32 pages. Reformatting of S4D19.
- S4D20 ● *IBM 360 Macro Definitions for Version 3.0 of SNOBOLA*. Griswold, R. E. Bell Labs, Holmdel, New Jersey. July 17, 1970. 36 pages. Listing of macro definitions used in the IBM 360 implementation of SNOBOL4.
- S4D20a ○ *IBM 360 Macro Definitions for Version 3 of SNOBOLA*. Griswold, R. E. The University of Arizona. September, 1980. 28 pages. Reformatting of S4D20.
- S4D21 ● *Catalog of Bell Laboratories SNOBOL Publications*. Shapiro, M. D. Bell Labs, Holmdel, New Jersey. July 31, 1970. 7 pages. Same as S4D18 with addition of publications on SNOBOL and SNOBOL3.
- S4D21a ● *Catalog of Bell Laboratories SNOBOL Publications*. Shapiro, M. D., revised by Griswold, M. T. Bell Labs, Holmdel, New Jersey. August 27, 1971. 7 pages. Revision and updating of S4D21.
- S4D21b ● *Catalog of Bell Laboratories SNOBOL Publications*. Shapiro, M. D., revised by Griswold, M. T. and Gimpel, J. F. Bell Labs, Holmdel, New Jersey. June 1, 1973. 11 pages. Updating of S4D21a.
- S4D21c ● *Catalog of Bell Laboratories SNOBOL Publications*. Shapiro, M. D., revised by Griswold, M. T. and Gimpel, J. F. Bell Labs, Holmdel, New Jersey. October 1, 1973. 11 pages. Updating of S4D21b.
- S4D21d ● *Catalog of SNOBOL Publications*. Shapiro, M. D., revised by Griswold, M. T. and Gimpel, J. F. Bell Labs, Holmdel, New Jersey. November 15, 1973. 12 pages. Updating of S4D21c.

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- S4D22 ● *Procedure Structure Cross-Reference Tables for SNOBOL4*. Griswold, R. E. Bell Labs, Holmdel, New Jersey. August 11, 1970. 27 pages. Tables of procedure relationships in the macro implementation of SNOBOL4, corresponding to S4D17.
- S4D23 ● *SPITBOL Version 2.0*. Dewar, R. B. K. Illinois Institute of Technology. February 12, 1967. 70 pages. Description of the SPITBOL implementation of SNOBOL4.
- S4D24 ● *The Theory and Implementation of Pattern Matching in SNOBOL4 and Other Programming Languages*. Gimpel, J. F. Bell Labs, Holmdel, New Jersey. February 19, 1971. 72 pages. Theoretical development of pattern matching in SNOBOL4, including a simplified algorithm and discussion of specific patterns.
- S4D25 ● *SNOBOL4 Source Cross-Reference Listing for Version 3.0*. Griswold, R. E. Bell Labs, Holmdel, New Jersey. March 10, 1971. 32 pages. Symbol cross-reference table to the source of SNOBOL4 as given in S4D17.
- S4D26 ● *SNOBOL4 Source and Cross-Reference Listings for Version 3.6*. Griswold, R. E. Bell Labs, Holmdel, New Jersey. April 1, 1971. 119 pages. Combined source listing and cross reference to the macro implementation of SNOBOL4. A combination of S4D17 and S4D25, updated to Version 3.6.
- S4D26a ● *SNOBOL4 Source and Cross-Reference Listings for Version 3.7*. Griswold, R. E. Bell Labs, Holmdel, New Jersey. July 15, 1971. 119 pages. Updating of S4D26 to correspond to Version 3.7.
- S4D26b ● *Source and Cross-Reference Listings for the SIL Implementation of SNOBOL4; Version 3.11*. Griswold, R. E. The University of Arizona. June 9, 1976. 137 pages. Updating of S4D26a to correspond to Version 3.11.
- S4D26c ○ *Source and Cross-Reference Listings for the SIL Implementation of SNOBOL4; Version 3.11*. Griswold, R. E. The University of Arizona. February, 1981. 126 pages. Updating of S4D26b to account for resequencing of Version 3.11 source.
- S4D27 ● *New Notation and Terminology for SNOBOL4 Source Material*. Griswold, R. E. Bell Labs, Holmdel, New Jersey. August 25, 1971. 9 pages. List of changes in terminology in the macro implementation of SNOBOL4 (from the old form (S4D8d and S4D26a) to the new form (S4D28) and *The Macro Implementation of SNOBOL4*, published by W.H. Freeman).
- S4D28 ● *SNOBOL4 Written in SIL*. Griswold, R. E. Bell Labs, Holmdel, New Jersey. August 25, 1971. 124 pages. Macro source and cross-reference listings of Version 3.7N of SNOBOL4. Differs for Version 3.7 in using new terminology. See S4D27.
- S4D29 ● *Design for SNOBOL4 for the PDP-10, PART I - The General*. Gimpel, J. F. Bell Labs, Holmdel, New Jersey. February 2, 1972. 131 pages. Description of the design of an implementation of a SNOBOL4 processor (later called SITBOL) for the PDP-10.
- S4D29a ● *A Design for SNOBOL4 for the PDP-10, PART I - The General*. Gimpel, J. F. Bell Labs, Holmdel, New Jersey. May 10, 1972. 138 pages. Revision of S4D29.
- S4D29b ● *A Design for SNOBOL4 for the PDP-10, PART I - The General*. Gimpel, J. F. Bell Labs, Holmdel, New Jersey. May 10, 1973. 139 pages. Minor revision of S4D29a.
- S4D30 ● *SITBOL Version 1.0*. Gimpel, J. F. Bell Labs, Holmdel, New Jersey. November 15, 1972. 59 pages. Description of SITBOL, an implementation of SNOBOL4 for the PDP-10. See S4D29.
- S4D30a ● *SITBOL Version 2.0*. Gimpel, J. F. Bell Labs, Holmdel, New Jersey. February 15, 1973. 60 pages. Revision of S4D30, updating documentation to correspond to Version 2.0 of SITBOL.

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- S4D30b ● *SITBOL Version 3.0*. Gimpel, J. F. Bell Labs, Holmdel, New Jersey. June 1, 1973. 65 pages. Revision of S4D30a, updating documentation to correspond to Version 3.0 of SITBOL.
- S4D31 ● *A Primer on SNOBOL4*. Gimpel, J. F. Bell Labs, Holmdel, New Jersey. November 22, 1972. 32 pages. An introduction to programming in SNOBOL4.
- S4D32 ● *The Minimization of Spacially-Multiplexed Character Sets*. Gimpel, J. F. Bell Labs, Holmdel, New Jersey. July 1, 1973. 21 pages. Description of a compact method of representing character sets for lexical analysis.
- S4D33 ● *Nonlinear Pattern Theory*. Gimpel, J. F. Bell Labs, Holmdel, New Jersey. October 1, 1973. 39 pages. Extension of the theory of patterns described in S4D24 to nonlinear patterns such as ABORT and FENCE.
- S4D34 ● *The Design of ELFBOL - A Full SNOBOL4 for the PDP-11*. Gimpel, J. F. and Hanson, David R. Bell Labs, Holmdel, New Jersey and Western Electric Co., Engineering Research Center, Princeton, New Jersey. October 5, 1973. 102 pages. Detailed design document for an implementation of SNOBOL4 for the PDP-11. Major emphasis is on storage management and data objects.
- S4D35 ● *New Control Mechanisms and Syntax for SNOBOL4*. Griswold, R. E. The University of Arizona. October 1, 1973. 24 pages. Description of control functions and new pattern-matching operations, comprising 'SNOBOLX'. Includes listing of SIL code to incorporate new features in the macro implementation of SNOBOL4.
- S4D35a ● *New Control Mechanisms and Syntax for SNOBOL4*. Griswold, R. E. The University of Arizona. November 13, 1973. 24 pages. Minor revision of S4D35.
- S4D36 ● *An Extended Function Definition Facility for SNOBOL4*. Druseikis, F. C. and Griswold, R. E. The University of Arizona. October 11, 1973. 29 pages. Description of an extension to the defined function mechanism of SNOBOL4 to provide generalized parameter transmission methods. Includes listing of SIL code to add the facility to the macro implementation of SNOBOL4.
- S4D37 ● *Additions to SNOBOL4 to Facilitate Programming Language Research*. Hallyburton, J. C., Jr. and Griswold, R. E. The University of Arizona. October 12, 1973. 12 pages. Description of a number of features added to the macro implementation of SNOBOL4 to aid research in programming language features.
- S4D37a ● *Additions to SNOBOL4 to Facilitate Programming Language Research*. Hallyburton, J. C., Jr. and Griswold, R. E. The University of Arizona. December 27, 1973. 14 pages. Revision of S4D37.
- S4D37b ● *Additions to SNOBOL4 to Facilitate Programming Language Research*. Hallyburton, J. C., Jr. and Griswold, R. E. The University of Arizona. August 8, 1974. 13 pages. Revision of S4D37a, including new features to capture expression evaluation.
- S4D37c ● *Additions to SNOBOL4 to Facilitate Programming Language Research*. Griswold, R. E. The University of Arizona. February 5, 1975. 9 pages. Minor revision of S4D37b.
- S4D38 ● *A New Approach to the Analysis and Synthesis of Strings*. Doyle, J. N. The University of Arizona. October 26, 1973. 67 pages. Description of extensions to pattern matching to provide directional symmetry, new control structures, and additional primitives. Also includes features for synthesis. Appendix includes examples of use.
- S4D38a ● *A New Approach to the Analysis and Synthesis of Strings*. Doyle, J. N. The University of Arizona. November 19, 1973. 67 pages. Minor revision of S4D38.

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- S4D39 ● *The Window to Hell, A Source-Language Mechanism for Accessing SNOBOLA Internal Structures.* Griswold, R. E. The University of Arizona. [April 1, 1974]. 27 pages. Description of facilities added to the macro implementation of SNOBOL4 to access internal structures from a running SNOBOL4 program.
- S4D40 ● *Some Highlights of the SITBOL Language Extensions to SNOBOLA.* Gimpel, J. F. Bell Labs, Holmdel, New Jersey. April 1, 1974. 11 pages. Description of language extensions to SNOBOL4 included in SITBOL.
- S4D40a ● *Some Highlights of the SITBOL Language Extensions to SNOBOLA.* Gimpel, J. F. Bell Labs, Holmdel, New Jersey. June 15, 1974. 11 pages. Minor revision of S4D40.
- S4D41 ● *A Hierarchical Approach to the Design of Linkage Conventions.* Gimpel, J. F. Bell Labs, Holmdel, New Jersey. May 1, 1974. 16 pages. Description of subroutine linkage and register conventions used in the implementation of SITBOL.
- S4D42 ● *Advanced Data Structure Manipulation Facilities for the SNOBOLA Programming Language.* Hallyburton, J. C., Jr. The University of Arizona. May 24, 1974. 175 pages. Description of design of facilities for traversing data structures in the manner of pattern matching.
- S4D43 ● *Bibliography of Numbered SNOBOLA Documents, May, 1967 through July 1974.* Griswold, M. T. and Griswold, R. E. The University of Arizona. August 2, 1974. 39 pages. Annotated bibliography of numbered SNOBOL4 documents in the following series: S4B, S4D, and S4N.
- S4D43a ● *Bibliography of Numbered SNOBOLA Documents, May 1967 through May 1975.* Griswold, R. E. The University of Arizona. May 20, 1975. 16 pages. Updating of S4D43 through May, 1975.
- S4D43b ● *Bibliography of Numbered SNOBOLA Documents, May 1967 through January 1978.* Griswold, R. E. The University of Arizona. January 11, 1978. 17 pages. Updating of S4D43a through January, 1978.
- S4D43c ● *Bibliography of Numbered SNOBOLA Documents, May 1967 through October 1980.* Griswold, R. E. The University of Arizona. October, 1980. 20 pages. Updating of S4D43b through October, 1980. Added S4PC, S4PD, and S4PL series.
- S4D43d ● *Bibliography of Numbered SNOBOLA Documents.* Griswold, R. E. The University of Arizona. August 27, 1981. 21 pages. Updating of S4D43c through August, 1981. Added information on availability of SNOBOL4 Project documents.
- S4D43e ○ *Bibliography of Numbered SNOBOLA Documents.* Griswold, R. E. The University of Arizona. February 6, 1982. 21 pages. Updating of S4D43d through January, 1982.
- S4D44 ● *The Measurement of SNOBOLA Programs.* Ripley, G. D. and Griswold, R. E. The University of Arizona. October 21, 1974. 14 pages. Description of performance monitoring features added to the macro implementation of SNOBOL4.
- S4D44a ● *The Measurement of SNOBOLA Programs.* Ripley, G. D. and Griswold, R. E. The University of Arizona. April 2, 1975. 14 pages. Minor revision of S4D44.
- S4D45 ● *The Design of SIXBOL, A Fast Implementation of SNOBOLA for the CDC 6000 Series Computers.* Sears, W. R. The University of Arizona. November 25, 1974. 144 pages. Design document for an efficient implementation of SNOBOL4 for the CDC 6000 series. Includes detailed layout of data and coding conventions.
- S4D46 ● *SNOBOLA Internal Structures, A Source Book for the Macro Implementation.* Griswold, R. E. The University of Arizona. December 13, 1974. 55 pages. Collections of diagrams of internal data structures for a number of SNOBOL4 source-language values.

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Extensions to SNOBOL4 described in S4D35a and S4D37b are included.

- S4D47 ● *Corrections and Additions to SNOBOL4 Project Documents*. Griswold, R. E. The University of Arizona. January 21, 1975. 4 pages. List of corrections and additions to SNOBOL4 Project Documents S4D8d, S4D22, S4D27, S4D35a, S4D36, S4D38a, and S4D39.
- S4D47a ● *Corrections and Additions to SNOBOL4 Project Documents*. Griswold, R. E. The University of Arizona. April 4, 1975. 4 pages. Minor revision of S4D47.
- S4D47b ● *Corrections and Additions to SNOBOL4 Project Documents*. Griswold, R. E. The University of Arizona. July 27, 1977. 3 pages. Minor revision of S4D47a.
- S4D48 z *A Generalized Facility for the Analysis and Synthesis of Strings, and a Procedure-Based Model of an Implementation*. Doyle, J. N. The University of Arizona. February 11, 1975. 99 pages. Revision of S4D38a extended to include a coroutine model of the implementation of pattern matching.
- S4D49 z *The Design of Transportable Interpreters*. Druseikis, F. C. The University of Arizona. February 27, 1975. 188 pages. Characterization of interpretive implementations of programming languages with special reference to SNOBOL4. Includes the design and implementation of Sil/2, a procedural language for implementing SNOBOL4-like interpreters.
- S4D50 ● *Programmer-Defined Variable Associations in SNOBOL4*. Hanson, D. R. The University of Arizona. April 3, 1975. 16 pages. Description of programmer-defined trapping of fetches and stores of variables similar to the built-in tracing and I/O association facilities. The implementation of these facilities in SITBOL is described.
- S4D51 ● *Additions to the SITBOL Implementation of SNOBOL4 to Facilitate Interactive Program Debugging*. Hanson, D. R. The University of Arizona. April 22, 1975. 27 pages. Describes interactive debugging facilities for SITBOL based on extensions to the programmer-variable associations described in S4D50. A listing of a SITBOL program using these facilities is included.
- S4D52 ● *Dynamic Allocation and Reclamation of Variable-Size Storage Elements in SITBOL*. Hanson, D. R. The University of Arizona. June 13, 1975. 12 pages. Description of storage management in SITBOL.
- S4D52a ● *Dynamic Allocation and Reclamation of Variable-Size Storage Elements in SITBOL*. Hanson, D. R. The University of Arizona. July 21, 1975. 15 pages. Minor revision of S4D52.
- S4D53 z *An External Function Facility for SITBOL*. Brandt, Donald R. The University of Arizona. February 7, 1976. 21 pages. Description of an extension of SITBOL to support routines written in assembly language and FORTRAN. Examples are included.
- S4D54 ● *Transporting the Macro Implementation of SNOBOL4; An Overview*. Griswold, R. E. The University of Arizona. March 1, 1976. 5 pages. Description of the process involved in the porting of the SIL implementation of SNOBOL4. Includes list of programs and documents.
- S4D54a ● *Transporting the Macro Implementation of SNOBOL4; An Overview*. Griswold, R. E. The University of Arizona. June 27, 1977. 5 pages. Minor revision of S4D54.
- S4D54b ● *Transporting the Macro Implementation of SNOBOL4; An Overview*. Griswold, R. E. The University of Arizona. September, 1980. 5 pages. Minor revision of S4D54a.
- S4D54c ○ *Transporting the SIL Version of SNOBOL4*. Griswold, R. E. The University of Arizona. February, 1981. 3 pages. Minor revision of S4D54b.

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- S4D55 z *Highlights of Two Implementations of SNOBOL4*. Griswold, R. E. The University of Arizona. February 4, 1977. 54 pages. Description of the SIL and SITBOL implementations of SNOBOL4.
- S4D56 ● *Measuring the Performance of Storage Management in SITBOL*. Ripley, G. D., Griswold, R. E., and Daugherty, C. C. The University of Arizona. [1977]. 21 pages. Description of the instrumentation of storage management in the SITBOL implementation of SNOBOL4 and results of its use.
- S4D57 ● *Implementations of SNOBOL4*. Griswold, R. E. The University of Arizona. January, 1981. 11 pages. Listings of known sources of implementations of SNOBOL4. Replacement for S4N21.
- S4D57a ● *Implementations of SNOBOL4*. Griswold, R. E. The University of Arizona. August 24, 1981. 11 pages. Updating of S4D57.
- S4D57b ● *Implementations of SNOBOL4*. Griswold, R. E. The University of Arizona. June 4, 1982. 11 pages. Updating of S4D57a.
- S4D57c ● *Implementations of SNOBOL4*. Griswold, R. E. The University of Arizona. December 7, 1982. 11 pages. Updating of S4D57b.
- S4D57d ● *Implementations of SNOBOL4*. Griswold, R. E. The University of Arizona. March 13, 1983. 14 pages. Updating of S4D57c with addition of forms to request SIL and the IBM 360 implementation from the University of Arizona.
- S4D57e ● *Implementations of SNOBOL4*. Griswold, R. E. The University of Arizona. March 29, 1983. 14 pages. Updating of S4D57d.
- S4D57f ● *Implementations of SNOBOL4*. Griswold, R. E. The University of Arizona. February 13, 1984. 15 pages. Updating of S4D57e.
- S4D57g ● *Implementations of SNOBOL4*. Griswold, R. E. The University of Arizona. May 18, 1984. 15 pages. Updating of S4D57f.
- S4D57h ● *Implementations of SNOBOL4*. Griswold, R. E. The University of Arizona. July 10, 1985. 8 pages. Updating of S4D57f.
- S4D58 ○ *Implementing SNOBOL4 in SIL; Version 3.11*. Griswold, R. E. February, 1981. 96 pages. Revision of and replacement for S4D8f.
- S4D59 ○ *Comparison of Terminologies for the SIL Implementation of SNOBOL4*. Griswold, R. E. March, 1981. 5 pages. Revision of and replacement for S4D27.

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- S4N1 ● *Notice to Installations Running Version 2.0 of SNOBOLA on the IBM System/360Or.* [Griswold, R. E.] [Bell Labs, Holmdel, New Jersey]. June 2, 1969. 2 pages. Notice of errors and list of corrections to Version 2.0 for the IBM 360.
- S4N1a ● *Notice to Installations Running Version 2.0 of SNOBOLA on the IBM System/360Or.* [Griswold, R. E.] [Bell Labs, Holmdel, New Jersey]. June 2, 1969. 2 pages. Reissue of S4N1 correcting a mistake. See S4N2.
- S4N2 ● *Notice to Installations Running Version 2.0 of SNOBOLA on the IBM System/360Or.* Griswold, R. E. Bell Labs, Holmdel, New Jersey. June 16, 1969. 2 pages. Notice of an error in S4N1 and corrected listing.
- S4N3 ● *Extended Distribution Tape for Version 3 of SNOBOLA.* [Griswold, R. E.] [Bell Labs, Holmdel, New Jersey]. December 15, 1969. 2 pages. Covering letter sent with tapes of Version 3 which included source files in addition to object modules.
- S4N3a ● *Extended Distribution Tape for Version 3 of SNOBOLA.* [Griswold, R. E.] [Bell Labs, Holmdel, New Jersey]. January 26, 1970. 4 pages. Revision of S4N3 to include source corrections for Version 3.1.
- S4N3b ● *Extended Distribution Tape for Version 3 of SNOBOLA.* [Griswold, R. E.] [Bell Labs, Holmdel, New Jersey]. March 10, 1970. 6 pages. Revision of S4N3a to include corrections for Version 3.2.
- S4N3c ● *Extended Distribution Tape for Version 3 of SNOBOLA.* [Griswold, R. E.] [Bell Labs, Holmdel, New Jersey]. June 30, 1970. 2 pages. Revision of S4N3b referencing corrections for Version 3.3 enclosed with tape.
- S4N3d ● *Extended Distribution Tape for Version 3 of SNOBOLA.* [Griswold, R. E.] [Bell Labs, Holmdel, New Jersey]. June 30, 1970. 2 pages. Revision of S4N3c referencing corrections for Version 3.4 enclosed with tape.
- S4N3e ● *Extended Distribution Tape for Version 3 of SNOBOLA.* [Griswold, R. E.] [Bell Labs, Holmdel, New Jersey]. June 30, 1970. 2 pages. Revision of S4N3d referencing corrections for Version 3.5 enclosed with tape.
- S4N3f ● *Extended Distribution Tape for Version 3 of SNOBOLA.* [Griswold, R. E.] The University of Arizona. September, 1980. 2 pages. Reissue of S4N3e.
- S4N3g ○ *Extended Distribution Tape for Version 3 of SNOBOLA.* [Griswold, R. E.] The University of Arizona. March 5, 1984. 2 pages. Revision of S4N3e to reflect change from SUPERZAP cards to tape.
- S4N4 ● *Version 3 of SNOBOLA, Installation Information for the IBM 360 Operating under OS.* [Griswold, R. E.] [Bell Labs, Holmdel, New Jersey]. January 23, 1970. 11 pages. Covering information sent with the IBM 360 implementation of Version 3 of SNOBOLA. Includes installation instructions, updates to Version 3.1, list of errors in Version 2 and Version 3.
- S4N4a ● *Version 3 of SNOBOLA, Installation Information for the IBM 360 Operating under OS.* [Griswold, R. E.] [Bell Labs, Holmdel, New Jersey]. March 20, 1970. 12 pages. Revision of S4N4 to correspond to Version 3.2.
- S4N4b ● *Version 3 of SNOBOLA, Installation Information for the IBM 360 Operating under OS.* [Griswold, R. E.] [Bell Labs, Holmdel, New Jersey]. June 25, 1970. 11 pages. Revision of S4N4a to correspond to Version 3.3.
- S4N4c ● *Version 3 of SNOBOLA, Installation Information for the IBM 360 Operating under OS.* [Griswold, R. E.] [Bell Labs, Holmdel, New Jersey]. July 17, 1970. 12 pages. Revision of S4N4b to correspond to Version 3.4.

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- S4N4d ● *Version 3 of SNOBOL4, Installation Information for the IBM 360 Operating under OS.* [Griswold, R. E.] [Bell Labs, Holmdel, New Jersey]. July 16, 1971. 11 pages. Revision of S4N4c to correspond to Version 3.5.
- S4N4e ● *Version 3 of SNOBOL4, Installation Information for the IBM 360 Operating under OS.* [Griswold, R. E.] The University of Arizona. September, 1980. 7 pages. Reissue of S4N4d with material on Version 2 of SNOBOL4 omitted.
- S4N4f ○ *Version 3 of SNOBOL4, Installation Information for the IBM 360 Operating under OS.* [Griswold, R. E.] The University of Arizona. March 5, 1984. 5 pages. Revision of S4N4e to reflect change from SUPERZAP cards to tape.
- S4N5 ● *Update to Version 3.1 of SNOBOL4.* [Griswold, R. E.] [Bell Labs, Holmdel, New Jersey]. January 30, 1970. 2 pages. Covering letter for deck of cards to update object module of Version 3.0 to Version 3.1.
- S4N6 ● *Updating to Version 3.2 of SNOBOL4.* [Griswold, R. E.] [Bell Labs, Holmdel, New Jersey]. March 20, 1970. 3 pages. Instructions for updating Version 3.1 to Version 3.2. Deck of correction cards included. Also lists errors in Version 3.
- S4N6a ● *Updating to Version 3.3 of SNOBOL4.* [Griswold, R. E.] [Bell Labs, Holmdel, New Jersey]. June 25, 1970. 2 pages. Revision of S4N6 to correspond to Version 3.3.
- S4N6b ● *Updating to Version 3.4 of SNOBOL4.* [Griswold, R. E.] [Bell Labs, Holmdel, New Jersey]. July 13, 1970. 2 pages. Revision of S4N6a to correspond to Version 3.4.
- S4N6c ● *Updating to Version 3.5 of SNOBOL4.* [Griswold, R. E.] [Bell Labs, Holmdel, New Jersey]. July 16, 1971. 3 pages. Revision of S4N6b to correspond to Version 3.5.
- S4N7 ● *Source Updates to Version 3 of SNOBOL4.* [Griswold, R. E.] [Bell Labs, Holmdel, New Jersey]. April 15, 1970. 3 pages. Information on updating SNOBOL4 source files. Describes an editor and lists errors in Version 3. Sent with decks of the editor and corrections.
- S4N7a ● *Source Updates to Version 3 of SNOBOL4.* [Griswold, R. E.] [Bell Labs, Holmdel, New Jersey]. June 15, 1970. 3 pages. Reissue of S4N7.
- S4N7b ● *SNOBOL4 MAIN1 Updates to Convert Version 3.3 to 3.4.* [Griswold, R. E.] [Bell Labs, Holmdel, New Jersey]. July 13, 1970. 1 page. Covering letter sent with additional deck of cards to update Version 3.3 to Version 3.4.
- S4N8 ● *Updates to SNOBOL4 Source Files.* [Griswold, R. E.] [Bell Labs, Holmdel, New Jersey]. July 9, 1970. 1 page. Description of editor used to update SNOBOL4 source files. Deck of the editor enclosed with S4N8.
- S4N9 ● *SNOBOL4 MAIN1 Updates to Convert Version 3.0 to 3.4.* [Griswold, R. E.] [Bell Labs, Holmdel, New Jersey]. July 14, 1970. 2 pages. Covering letter with deck of cards to update Version 3.0 to Version 3.4. Differs from S4N7b in referencing complete update deck to be applied to original source.
- S4N9a ● *SNOBOL4 MAIN1 Updates to Convert Version 3.0 to 3.6.* [Griswold, R. E.] [Bell Labs, Holmdel, New Jersey]. March 19, 1971. 4 pages. Revision of S4N9 to correspond to Version 3.6.
- S4N9b ● *SNOBOL4 MAIN1 Updates to Convert Version 3.0 to 3.7.* [Griswold, R. E.] [Bell Labs, Holmdel, New Jersey]. July 12, 1971. 4 pages. Revision of S4N9a to correspond to Version 3.7.
- S4N9c ● *SNOBOL4 MAIN1 Updates to Convert Version 3.7 to 3.9.* [Griswold, R. E.] [The University of Arizona]. May 19, 1972. 1 page. Covering letter accompanying updates to convert Version 3.7 to Version 3.9.

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- S4N9d ● *SNOBOLA MAIN1 Updates to Convert Version 3.9 to 3.10.* [Griswold, R. E.] The University of Arizona. November 1, 1972. 4 pages. Revision of S4N9c to correspond to Version 3.10. Includes listing of corrected parts of source file.
- S4N10 ● *SNOBOLA MAIN2 Updates to Convert Version 3.0 to 3.4.* [Griswold, R. E.] [Bell Labs, Holmdel, New Jersey]. July 14, 1970. 3 pages. Covering letter sent with deck to correct IBM 360 optimized source from Version 3.0 to Version 3.4. Includes list of errors in Version 3.
- S4N11 ● *Correction to MAIN1 Update from Version 3.3 to 3.4.* [Griswold, R. E.] [Bell Labs, Holmdel, New Jersey]. July 22, 1970. 1 page. Notification of error in S4N7b.
- S4N12 ● *Release 19 FORTRAN I/O for IBM 360 Installations.* [Griswold, R. E.] [Bell Labs, Holmdel, New Jersey]. August 25, 1971. 1 page. Covering letter with tapes containing FORTRAN I/O library for Release 19 of OS.
- S4N13 ● *Availability of Release 19 FORTRAN I/O for IBM 360 Installations of SNOBOLA.* [Griswold, R. E.] [Bell Labs, Holmdel, New Jersey]. August 25, 1971. 1 page. Announcement of availability of Release 19 I/O package. See S4N12.
- S4N14 ● *Return of Tapes on Deposit.* [Griswold, R. E.] [Bell Labs, Holmdel, New Jersey]. August 25, 1971. 1 page. Covering letter sent with returned tapes that had been held on deposit for future issues of SNOBOL4. Announced intention not to issue additional SNOBOL4 implementations.
- S4N15 ● *Record of SNOBOLA Version 3 Updates.* [Griswold, R. E.] [The University of Arizona]. June 13, 1972. 6 pages. Listing of updates to Version 3 through Version 3.9.
- S4N15a ● *Record of SNOBOLA Version 3 Updates.* [Griswold, R. E.] [The University of Arizona]. November 6, 1972. 7 pages. Revision of S4N15 to correspond to Version 3.10.
- S4N16 ● *Corrections to Version 3 of SNOBOLA.* [Griswold, R. E.] [The University of Arizona]. October 1, 1972. 4 pages. Lists errors corrected through Version 3.10.
- S4N17 ● *Version 3.10 of the Macro Implementation of SNOBOLA.* Griswold, R. E. [The University of Arizona]. February 28, 1974. 26 pages. Describes method of updating the source file. Contains listings of Version 3.10 alters and resulting modifications to the source. Includes listing of editor program. Summarizes all errors corrected through Version 3.10.
- S4N17a ● *Version 3.10 of the Macro Implementation of SNOBOLA.* Griswold, R. E. The University of Arizona. May 7, 1975. 20 pages. Minor revision of S4N17.
- S4N18 ● *Converting SNOBOLA to SNOBOLX.* Griswold, R. E. The University of Arizona. March 21, 1974. 15 pages. Describes installation of updates to add SNOBOLX features (see S4D35a) to the macro implementation of SNOBOLA. Includes listing of alters.
- S4N18a ● *Converting SNOBOLA to SNOBOLX.* Griswold, R. E. The University of Arizona. April 19, 1974. 11 pages. Revision of S4N18. Adds required modification of syntax tables.
- S4N18b ● *Converting SNOBOLA to SNOBOLX.* Griswold, R. E. The University of Arizona. July 5, 1974. 9 pages. Minor revision of S4N18a.
- S4N18c ● *Converting SNOBOLA to SNOBOLX.* Griswold, R. E. The University of Arizona. January 20, 1975. 9 pages. Minor revision of S4N18b.
- S4N18d ● *Converting SNOBOLA to SNOBOLX.* Griswold, R. E. The University of Arizona. May 6, 1975. 7 pages. Minor revision of S4N18c.
- S4N19 ● *Adding the Extended Function Definition Facility to SNOBOLA.* Griswold, R. E. The University of Arizona. May 24, 1974. 13 pages. Describes installation of updates to add

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the extended definition facility (see S4D36) to the macro implementation of SNOBOL4. Includes listing of alters.

- S4N19a ● *Adding the Extended Function Definition Facility to SNOBOL4*. Griswold, R. E. The University of Arizona. July 5, 1974. 13 pages. Minor revision of S4N19.
- S4N20 ● *Adding The Window to Hell to SNOBOLX*. Griswold, R. E. The University of Arizona. July 9, 1974. 9 pages. Describes installation of updates to add The Window to Hell (see S4D39) to SNOBOLX. Includes listing of the alters.
- S4N20a ● *Adding The Window to Hell to SNOBOLX*. Griswold, R. E. The University of Arizona. August 19, 1974. 10 pages. Revision and correction of S4N20.
- S4N21 ● *Sources of Implementations of SNOBOL4*. Griswold, R. E. The University of Arizona. April 29, 1975. 7 pages. Listing of sources of implementations of SNOBOL4 for various computers.
- S4N21a ● *Sources of Implementations of SNOBOL4*. Griswold, R. E. The University of Arizona. June 11, 1975. 8 pages. Minor revision of S4N21.
- S4N21b ● *Sources of Implementations of SNOBOL4*. Griswold, R. E. The University of Arizona. February 27, 1976. 9 pages. Minor revision of S4N21a.
- S4N21c ● *Sources of Implementations of SNOBOL4*. Griswold, R. E. The University of Arizona. October 4, 1976. 9 pages. Minor revision of S4N21b.
- S4N21d ● *Sources of Implementations of SNOBOL4*. Griswold, R. E. The University of Arizona. April 24, 1977. 9 pages. Minor revision of S4N21c.
- S4N21e ● *Sources of Implementations of SNOBOL4*. Griswold, R. E. The University of Arizona. September 10, 1977. 9 pages. Minor revision of S4N21d.
- S4N21f ● *Sources of Implementations of SNOBOL4*. Griswold, R. E. The University of Arizona. January 7, 1977. 10 pages. Minor revision of S4N21e.
- S4N21g ● *Sources of Implementations of SNOBOL4*. Griswold, R. E. The University of Arizona. June 17, 1979. 8 pages. Minor revision of S4D21f.
- S4N21h ● *Sources of Implementations of SNOBOL4*. Griswold, R. E. The University of Arizona. June 1, 1980. 9 pages. Minor revision of S4N21g.
- S4N22 ● *Updating the SIL Implementation of SNOBOL4 from Version 3.10 to 3.11*. Griswold, R. E. The University of Arizona. May 20, 1975. 2 pages. Update 11 to the SIL implementation of SNOBOL4, including list of errors corrected.
- S4N23 ● *Version 3.11 of the SIL Implementation of SNOBOL4*. Griswold, R. E. The University of Arizona. May 20, 1975. 22 pages. Describes method of updating the source file. Contains listings of Version 3.11 alters and resulting modifications to the source. Includes listing of editor program. Summarizes all errors corrected through Version 3.11.
- S4N24 ● *Correction to Versions 3.10 and 3.11 of the SIL Implementation of SNOBOL4*. Griswold, R. E. The University of Arizona. August 1980. 1 page. Lists correction to an error that appears in some instances of the SIL source for Versions 3.10 and 3.11.
- S4N24a ● *Corrections to Versions 3.10 and 3.11 of the SIL Implementation of SNOBOL4*. Griswold, R. E. The University of Arizona. December 15, 1981. 2 pages. Modification of S4N24 to add error in passing arguments to external functions.
- S4N24b ● *Corrections to Versions 3.10 and 3.11 of the SIL Implementation of SNOBOL4*. Griswold, R. E. The University of Arizona. December 27, 1981. 2 pages. Minor revision of S4N24a.

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- S4N24c ○ *Corrections to Versions 3.10 and 3.11 of the SIL Implementation of SNOBOL4.* Griswold, R. E. The University of Arizona. April 26, 1982. 2 pages. Minor revision of S4N24b.
- S4N25 ● *Distribution of the SIL (Macro) Implementation of SNOBOL4.* Griswold, R. E. The University of Arizona. November 12, 1981. 3 pages. Lists policy for distribution of machine-independent source and the IBM 360 implementation of the SIL version of SNOBOL4. Includes forms for requesting copies.
- S4N25a ● *Distribution of the SIL (Macro) Implementation of SNOBOL4.* Griswold, R. E. The University of Arizona. December 18, 1981. 3 pages. Minor revision of S4N25.
- S4N25b ○ *Distribution of the SIL (Macro) Implementation of SNOBOL4.* Griswold, R. E. The University of Arizona. April 9, 1982. 3 pages. Minor revision of S4N25a.

SNOBOL4 Program Corrections

S4PC1 z *Corrections to Program Material from "String and List Processing in SNOBOL4"*.
Griswold, R. E. The University of Arizona. September 1, 1975. 3 pages. List of
corrections to the program material from the Prentice-Hall book *String and List
Processing in SNOBOL4* as distributed in S4PL1.

SNOBOL4 Program Descriptions

- S4PD1 ● *CREATOR*. Griswold, R. E. The University of Arizona. March 8, 1973. 9 pages. Description of a SNO12 program to create ASCII text from encoded BCD input.
- S4PD1a ● *CREATOR*. Griswold, R. E. The University of Arizona. March 26, 1973. 9 pages. Minor revision of S4PD1.
- S4PD1b ● *CREATOR*. Griswold, R. E. The University of Arizona. May 7, 1973. 10 pages. Revision of S4PD1a, including additional features.
- S4PD1c ● *CREATOR, A Program for Preparing ASCII Text*. Griswold, R. E. The University of Arizona. December 21, 1973. 13 pages. Revision of S4PD1b, adding program listing.
- S4PD2 ● *FORMATTER, A Document Preparation Program*. Griswold, R. E. The University of Arizona. December 21, 1973. 33 pages. Description of a SNO12 program for formatting text. Includes program listing.
- S4PD2a ● *FORMATTER, A Document Preparation Program*. Griswold, R. E. The University of Arizona. March 8, 1974. 35 pages. Revision of S4PD2, including new features.
- S4PD3 ● *EDITOR, A Program for Editing Text*. Griswold, R. E. The University of Arizona. December 21, 1973. 18 pages. Description of a SNO12 program for editing files. Includes program listing.
- S4PD4 ● *SPIDER, A Program for Displaying SNOBOLA Structures*. Griswold, R. E. The University of Arizona. February 6, 1974. 37 pages. Description of a SNOBOLX program for creating diagrams of SNOBOL4 internal structures. Includes program listings.
- S4PD4a ● *SPIDER II, A Program for Displaying SNOBOLA Structures*. Griswold, R. E. The University of Arizona. March 22, 1974. 48 pages. Revision of S4PD4, including many new features.
- S4PD4b z *SPIDER-10*. Griswold, R. E. The University of Arizona. September 13, 1974. 34 pages. Major revision of S4PD4a, including a number of new features. This document describes the DEC-10 version of the program.
- S4PD5 ● *PRECOM, A General Purpose Preprocessor*. Hanson, D.R. The University of Arizona. May 21, 1974. 31 pages. Description of a SITBOL utility program to process common-deck files. Includes program listing.
- S4PD5a ● *PRECOM, A General Purpose Preprocessor*. Hanson, D.R. The University of Arizona. June 7, 1975. 30 pages. Minor revision of S4PD5.
- S4PD6 ● *TEXT, A Program for Formatting Text Files*. Hanson, D.R. The University of Arizona. May 21, 1974. 31 pages. Description of a SITBOL program for formatting text. Includes program listing.
- S4PD6a ● *LABELS, A Program for Formatting Mailing Labels*. Griswold, R. E. The University of Arizona. May 28, 1975. 33 pages. Minor revision of S4PD6.
- S4PD7 ● *LABELS, A Program for Formatting Mailing Labels*. Griswold, R. E. The University of Arizona. July 21, 1974. 7 pages. Description of a SITBOL program for formatting mailing labels. Includes program listing.
- S4PD8 ● *RSG, A Random Sentence Generator*. Griswold, R. E. The University of Arizona. October 4, 1974. 23 pages. Description of a program for constructing grammars and generating sentences from the corresponding languages. Appendices include sample output and a program listing.
- S4PD9 ● *GENLAB, A Program for Synthesizing Text*. Griswold, R. E. The University of Arizona. December 7, 1974. 43 pages. Major revision of S4PD8 including many new features.

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- S4PD9a z *GENLAB II; A Program for Synthesizing Text*. Griswold, R. E. The University of Arizona. May 22, 1975. 33 pages. Minor revision of S4PD9.
- S4PD10 ● *GENLAB II; A Program for Synthesizing Text*. Griswold, R. E. The University of Arizona. December 3, 1974. 8 pages. Description of program for generating mailing labels, form letters, etc.
- S4PD10a ● *GENLAB II; A Program for Synthesizing Text*. Griswold, R. E. The University of Arizona. April 21, 1975. 11 pages. Minor revision of S4PD10.
- S4PD10b z *GENLAB II; A Program for Synthesizing Text*. Griswold, R. E. The University of Arizona. January 28, 1978. 10 pages. Minor revision of S4PD10a.
- S4PD11 ● *ACOLYTE; A Document Formatting Program*. Anderson, R. O. and Griswold, R. E. The University of Arizona. March 10, 1975. 49 pages. Description of a document formatting program.
- S4PD11a ● *ACOLYTE; A Document Formatting Program*. Anderson, R. O. and Griswold, R. E. The University of Arizona. October 13, 1975. 56 pages. Revision of S4PD11.
- S4PD11b ● *ACOLYTE; A Document Formatting Program*. Anderson, R. O. and Griswold, R. E. The University of Arizona. February 18, 1976. 57 pages. Minor revision of S4PD11a.
- S4PD12 ● *The Compilers for the Sil/2 Language: A Reference Manual*. Druseikis, F. C. The University of Arizona. March 19, 1975. 69 pages. Description of compilers for the Sil/2 system implementation language used in the implementation of SL5.
- S4PD12a ● *The Compilers for the Sil/2 Language: A Reference Manual*. Druseikis, F. C. The University of Arizona. October 2, 1975. 74 pages. Revision of S4PD12.
- S4PD13 ● *GSPPOOL — A Program to Control the GSI-300*. Druseikis, F. C. The University of Arizona. April 22, 1975. 14 pages. Description of a program to format and control output to a GSI-300 daisy-wheel printer. Includes program listing.
- S4PD14 ● *SOSLST; A Program for Generating SOS Listings*. Griswold, R. E. The University of Arizona. August 20, 1975. 2 pages. Description of a program to generate spooled listings in SOS editor format on a DEC-10 operating under TOPS-10.
- S4PD14a ● *SOSLST; A Program for Generating SOS Listings*. Griswold, R. E. The University of Arizona. February 10, 1976. 2 pages. Minor revision of S4PD14.
- S4PD14b z *SOSLST; A Program for Generating SOS Listings*. Griswold, R. E. The University of Arizona. February 6, 1978. 2 pages. Minor revision of S4PD14a.
- S4PD15 ● *DDT.SNO*. Druseikis, F. C. [The University of Arizona]. September 16, 1975. 8 pages. Description of a collection of SNOBOL4 functions that are useful in debugging SNOBOL4 programs. Includes program listing.

SNOBOL4 Program Listings

- S4PL1 Z *Program Material from "String and List Processing in SNOBOL4"*. Griswold, R. E. The University of Arizona. March 17, 1975. 33 pages. Listing of all the program material from the Prentice-Hall book *String and List Processing in SNOBOL4*.