

Courant Institute of
Mathematical Sciences
Computer Science Department

The SETL Project Master Catalog

A Comprehensive Listing of Reports,
Working Papers, and Computer Readable
Document and Program Files Pertaining
to Work at New York University on the
SETL Set-Theoretic Programming Language

Compiled by Robert Abes

Prepared under Grant # NSF-GJ-1202X
with the National Science Foundation



New York University

COMPUTER SCIENCE DEPARTMENT
COURANT INSTITUTE OF MATHEMATICAL SCIENCES
NEW YORK UNIVERSITY

THE SETL PROJECT MASTER CATALOG

A Comprehensive Listing of Reports, Working Papers,
and Computer Readable Document and Program Files
Pertaining to Work at New York University on the
SETL Set-Theoretic Programming Language

(Complete as of September 1973)

Compiled by Robert Abes

PREPARED UNDER GRANT # NSF - GJ - 1202X

WITH THE NATIONAL SCIENCE FOUNDATION

SETL NEWSLETTER 69
REVISED 10/73

FEBRUARY 5, 1973
F. ABES

THE SETL PROJECT - MASTER CATALOG

- PART 1 - MAJOR DOCUMENTS.
- PART 2 - SETL NEWSLETTERS.
- PART 3 - LITTLE NEWSLETTERS.
- PART 4 - ADDITIONAL SETL DOCUMENTATION.
- PART 5 - BALM NEWSLETTERS.
- PART 6 - THE SETL (CYRILLIC) NEWSLETTERS.
- PART 7 - THE SETL ALGORITHMS LIBRARY.
- PART 8 - THE SETL TEST PACKAGES.
- PART 9 - THE SETL ARCHIVES.

SUBSCRIBERS, PLEASE NOTE:

THE SETL AND BALM NEWSLETTERS ARE AVAILABLE FREE IN SINGLE COPIES. THOSE WISHING TO BE ADDED TO THE REGULAR MAILING LIST MAINTAINED FOR THE SETL AND BALM NEWSLETTERS SHOULD WRITE TO:

MISS LENORA GREENE
COURANT INSTITUTE OF MATHEMATICAL SCIENCES
251 MERCER STREET
NEW YORK, NEW YORK 10012

ENCLOSING A CHECK FOR FIVE DOLLARS FOR A ONE YEAR SUBSCRIPTION WHICH SHOULD BE MADE OUT TO "PUBLICATIONS OFFICE - COURANT INSTITUTE",

CERTAIN OF OUR LONGER DOCUMENTS, LISTED ON THE NEXT PAGE, ARE AVAILABLE DIRECT FROM OUR PUBLICATIONS OFFICE AT THE STATED PRICES. TO ORDER COPIES, ENCLOSE PAYMENT IN ADVANCE AND WRITE TO:

COURANT INSTITUTE OF MATHEMATICAL SCIENCES
DEPARTMENT LN
251 MERCER STREET
NEW YORK, NEW YORK 10012

PART 1 - MAJOR DOCUMENTS,

PRICE LIST AND INFORMATION ON
MACHINE READABLE OUTPUT FORMATS

1. ON PROGRAMMING, AN INTERIM REPORT ON THE SETL PROJECT.
J. SCHWARTZ

INSTALLMENT 1. GENERALITIES,
JANUARY 1973

VIII+160 PP

PRICE \$4.25

INSTALLMENT 2. THE SETL LANGUAGE, AND EXAMPLES OF ITS USE,
OCTOBER 1973

VIII+520 PP

PRICE \$13.00

INSTALLMENT 3. EXTENDED FACILITIES OF THE SETL LANGUAGE,
TO APPEAR

2. A SETL PRIMER,

H. MULLISH

M. GOLDSTEIN

A STEP-BY-STEP TUTORIAL WITH OVER 100 ILLUSTRATIVE
PROGRAMMETS,

JUNE 1973

V+201 PP

PRICE \$5.25

3. THE SETL RUN-TIME LIBRARY.

THIS IS THE RUN-TIME SUPPORT SYSTEM FOR SETL. IT IS
WRITTEN IN LISP AND IS WELL DOCUMENTED INTERNALLY.
IT SUPPORTS ALL OF THE MAIN SET-THEORETIC PRIMITIVES
OF SETL AND IS OF PRIME INTEREST TO THOSE WISHING TO
DEVELOP OR MODIFY THE SETL SYSTEM. THE RUN-TIME
LIBRARY IS AVAILABLE IN MACHINE READABLE FORM.

PART 1 - MAJOR DOCUMENTS.

4. ASL: A PROPOSED VARIANT OF SETL.

H. WARREN

A PRELIMINARY DESCRIPTION OF AN ALGORITHM SPECIFICATION LANGUAGE, GENERATED AS AN EXTENDED RESPONSE TO A REQUEST FOR CRITICISMS OF SETL. AVAILABLE FREE ON REQUEST.

MAY 1973

XI+326 PP

IMM 397

5. OTHER MACHINE READABLE INFORMATION.

THOSE INTERESTED IN ACQUIRING ANY OF THE FOLLOWING DOCUMENTS IN MACHINE READABLE FORM SHOULD ADDRESS AN INQUIRY CONCERNING PRICE TO MISS LENORA GREENE AT THE ADDRESS GIVEN ABOVE.

SETL NEWSLETTER 49 -

DETAILED SPECIFICATIONS OF CERTAIN SETL OPERATIONS.

SETL NEWSLETTER 66 -

BALMSETL USER'S MANUAL VERSION 1.0.

SETL NEWSLETTER 70 -

SETLB USER'S MANUAL.

SETL NEWSLETTER 73 -

USER'S GUIDE TO THE SETL RUN-TIME LIBRARY.

FILE SETLBTESTPACKAGES; ARCHIVE ITEM 37 -

THE SETLB TEST PACKAGES DESCRIBED IN PART 7 OF THIS CATALOG.

FILE ALGORITHMSPL -

THE SETL ALGORITHMS LIBRARY ITEMIZED IN PART 6 OF THIS CATALOG

ARCHIVE ITEMS 16, 12, 13 -

BALM PRIMER

BALM REFERENCE MANUAL

BALM SYSTEM LISTING

PART 2 - SETL NEWSLETTERS,

1. BALM-SETL -- A SIMPLE IMPLEMENTATION OF SETL.
M. HARRISON
NOVEMBER 1970 8 PP
2. NO LONGER AVAILABLE.
3. MODIFICATIONS AND EXTENSIONS FOR SETL, PART 1.
D. SHIELDS
NOVEMBER 1970 6 PP
4. AN APL VERSION OF PETER MARKSTEIN'S MCKEEMAN TABLE ROUTINE.
P. MARKSTEIN
NOVEMBER 1970 2 PP
5. MISCELLANEOUS ALGORITHMS WRITTEN IN SETL.
J. SCHWARTZ
NOVEMBER 1970 7 PP
6. A REVISED SETL VERSION OF THE MCKEEMAN PARSER.
P. MARKSTEIN
NOVEMBER 1970 3 PP
7. MODIFICATIONS AND EXTENSIONS FOR SETL, PART 2.
D. SHIELDS
NOVEMBER 1970 8 PP
8. ADDITIONAL MISCELLANEOUS SETL ALGORITHMS.
J. SCHWARTZ
NOVEMBER 1970 4 PP
9. IMPLEMENTATION AND LANGUAGE DESIGN.
M. HARRISON
DECEMBER 1970 5 PP
10. A SORTING ALGORITHM.
K. NALY
DECEMBER 1970 3 PP

11. MODIFICATIONS AND EXTENSIONS FOR SETL, PART 3.
D. SHIELDS
DECEMBER 1970 4 PP
12. RECAPITULATION OF THE BASIC PARTS OF THE SETL LANGUAGE.
J. SCHWARTZ
JANUARY 1971 14 PP
13. ADDITIONAL MISCELLANEOUS ALGORITHMS.
J. SCHWARTZ
JANUARY 1971 7 PP
14. ADDITIONAL SYNTACTIC EXTENSIONS.
J. SCHWARTZ
JANUARY 1971 3 PP
15. A PROPOSED SETL IMPLEMENTATION PLAN THROUGH THE END OF THE
BOOTSTRAP PHASE.
J. SCHWARTZ
FEBRUARY 1971 2 PP
16. SETL 64-CHARACTER SET -- 48-CHARACTER SET / 026 KEYPUNCH -- CDC
5600 64-CHARACTER SET / 029 KEYPUNCH.
K. MALY
FEBRUARY 1971 2 PP
17. NO LONGER AVAILABLE.
18. PRELIMINARY SPECIFICATION OF BALMSETL CONVENTIONS.
D. SHIELDS
FEBRUARY 1971 2 PP
19. LEXICAL DESCRIPTION OF SETL.
K. MALY
FEBRUARY 1971 5 PP
20. BALMSETL USER'S GUIDE (IN BRIEF).
D. SHIELDS
MARCH 1971 4 PP

21. AN OUTSIDE REVIEW: COMMENTS ON THE SETL DRAFT.
ANON. (PUBLISHER)
APRIL 1971 8 PP
22. SOME SMALL AND LARGE LANGUAGE EXTENSIONS FOR CONSIDERATION.
J. SCHWARTZ
APRIL 1971 4 PP
23. CURRENT STATUS OF BALMSETL IMPLEMENTATION.
J. SHIELDS
APRIL 1971 3 PP
24. DESCRIPTION OF A REGISTER ALLOCATION ALGORITHM.
K. KENNEDY
APRIL 1971 8 PP
25. A PRINT ROUTINE.
J. LOERING
APRIL 1971 3 PP
26. THE CURRENTLY SPECIFIED FORM OF SETL FROM A MORE FUNDAMENTAL
POINT OF VIEW.
J. SCHWARTZ
MAY 1971 8 PP
27. CODE FOR THE POSTPARSE SETUP PROCEDURE (POSTPARSE METALANGUAGE
ANALYSIS).
J. SCHWARTZ
MAY 1971 15 PP
28. AN ALGORITHM FOR COMMON SUBEXPRESSION ELIMINATION AND CODE
MOTION.
K. KENNEDY
MAY 1971 10 PP
29. SOME ISSUES CONNECTED WITH SUBROUTINE LINKAGE.
J. SCHWARTZ
MAY 1971 3 PP
30. SINISTER CALLS.
J. SCHWARTZ
MAY 1971 32 PP

31. AN ADDITIONAL PRELIMINARY REMARK ON THE IMPORTANCE OF ~OBJECT
TYPES~ FOR SETL, WITH SOME REFLECTIONS ON THE MOTION OF ~DATA
STRUCTURE LANGUAGE~, J. SCHWARTZ
MAY 1971 12 PP
32. HYPER-SETL PROCEDURAL LANGUAGES, J. SCHWARTZ
MAY 1971 5 PP
33. WHAT IS PROGRAMMING, J. SCHWARTZ
MAY 1971 9 PP
34. SYNTAX REVISIONS IN PREPARATION FOR IMPLEMENTATION, J. SCHWARTZ
MAY 1971 12 PP
35. A NEW FORM FOR THE IFF-STATEMENT, D. SHIELDS
MAY 1971 7 PP
36. NO LONGER AVAILABLE,
37. INITIAL DESCRIPTION OF AN ALGORITHM FOR USE-DEFINITION CHAINING
IN OPTIMIZATION, P. OWENS
JULY 1971 6 PP K. KENNEDY
38. AN ALGORITHM FOR LIVE-DEAD ANALYSIS INCLUDING NODE-SPLITTING FOR
IRREDUCIBLE PROGRAM GRAPHS, K. KENNEDY
JANUARY 1972 10 PP
39. MORE DETAILED SUGGESTIONS CONCERNING ~DATA STRATEGY~
ELABORATIONS FOR SETL, J. SCHWARTZ
MAY 1971 54 PP
40. NO LONGER AVAILABLE

41. ADDITIONAL PLANNING DETAIL FOR THE CURRENT AND NEXT PHASE OF
SETL IMPLEMENTATION, J. SCHWARTZ
JUNE 1971 4 PP
42. REVISED CONVENTIONS CONCERNING TUPLES, J. SCHWARTZ
JUNE 1971 6 PP
43. A PARSING SCHEME FOR FORTRAN, S. GRUBER
JULY 1971 20 PP
44. COMPREHENSIVE SETL SPECIFICATIONS, K. MALY
JULY 1971 11 PP
45. SEMI-LOCAL SETL OPTIMIZATION, D. SHIELDS
JULY 1971 8 PP
46. GENERALIZED NODAL SPAN PARSE ROUTINE - PRELIMINARY DRAFT, J. SCHWARTZ
JULY 1971 12 PP
47. AN OUTLINE FOR A PARSING SCHEME FOR SETL, K. MALY
JULY 1971 3 PP
48. TOWARD A DOCUMENTATION OF THE STRING PROJECT'S PROGRAM FOR
PARSING ENGLISH SENTENCES, J. HOBBS
AUGUST 1971 19 PP
49. SPECIFICATION OF THE SETL RUN TIME LIBRARY (REVISION 2), I. WAPREN
APRIL 1973 106 PP
50. A THREE-PHASE PARSING SCHEME FOR SETL, K. MALY
SEPTEMBER 1971 3 PP

51. NO LONGER AVAILABLE.

52. COMMENTS ON SETL.

SEPTEMBER 1971

6 PP

J. FARLEY

53. SETL TO LITTLE TRANSLATOR: A FIRST LOOK.

SEPTEMBER 1971

26 PP

H. WARREN

54. CURRENT STATUS OF BALISETL.

SEPTEMBER 1971

5 PP

S. GRUBER

55. SETL SUGGESTIONS AND QUESTIONS.

SEPTEMBER 1971

5 PP

S. FINKELSTEIN

56. ADDITIONAL COMMENTS ON SOME BASIC SETL OPERATIONS.

SEPTEMBER 1971

4 PP

J. FARLEY

56A. MORE COMMENTS ON SETL.

OCTOBER 1971

5 PP

J. FARLEY

56B. MORE SETL COMMENTS.

OCTOBER 1971

10 PP

J. FARLEY

57. MINIMIZING COPYING IN SETL: PRELIMINARY OBSERVATIONS.

OCTOBER 1971

3 PP

H. WARREN

58. PHASE ONE OF THE SETL COMPILER.

OCTOBER 1971

21 PP

K. MALY

59. AN ALGEBRA OF ASSIGNMENT.

OCTOBER 1971

25 PP

R. KRUTAR

60. SETL COMPILED CODE: CALLS TO SETL PROCEDURES.

NOVEMBER 1971

48 PP

H. WARREN

61. SYNTACTIC STRUCTURE OF SETL.
NOVEMBER 1971 14 PP K. MALY
62. FINAL SPECIFICATION OF SETL AND PARSER.
DECEMBER 1971 20 PP K. MALY
63. THE SETL PRINT ROUTINE.
JANUARY 1972 5 PP G. FISHER
64. SETL COMPILER WITH ELABORATED DATA STRUCTURES.
JANUARY 1972 33 PP K. MALY
65. SOME NOTATIONAL SUGGESTIONS.
FEBRUARY 1972 2 PP R. BONIC
66. BALMSETL USER'S MANUAL VERSION 1.0.
FEBRUARY 1972 71 PP E. MILGROM
67. DATA STRUCTURES OF THE SETL COMPILER FROM THE LITTLE VERSION.
FEBRUARY 1972 16 PP K. MALY
68. SOME THOUGHTS ON EFFICIENT PROGRAMMING IN SETLB.
OCTOBER 1972 5 PP S. BROWN
69. THE SETL PROJECT - MASTER CATALOG (REVISED 10/73).
FEBRUARY 1973 37 PP R. ABES
70. SETLB USER'S MANUAL.
FEBRUARY 1972 66 PP J. SCHWARTZ

71. DEDUCING THE LOGICAL STRUCTURE OF OBJECTS OCCURRING IN SETL PROGRAMS. J. SCHWARTZ
APRIL 1972 14 PP
72. AN INTRODUCTORY EXPLANATION OF SETL: A STATUS REVIEW AND PROFILE OF THE SETL USER GROUP. D. SHIELDS
APRIL 1972 13 PP
73. USER'S GUIDE TO THE SETL RUN-TIME LIBRARY. K. Maly
APRIL 1972 33 PP H. WARREN
74. PROJECT PLAN FOR FIRST STAGE OF IMPLEMENTATION.
(PARTIAL TRANSLATION FROM THE RUSSIAN) L. GORODNAYA
D. LEVIN
MAY 1972 3 PP V. CHERNOROD
75. SOME THOUGHTS ON THE USE OF BALM TO IMPLEMENT SETL.
(THIS IS ALSO BALM BULLETIN NO. 13) E. MILGROM
JUNE 1972 7 PP
76. SEMANTIC DEFINITION MATTERS. J. SCHWARTZ
MAY 1973 91 PP B. JENNINGS
77. TRANSFERRING SETL TO OTHER MACHINES. J. SCHWARTZ
SEPTEMBER 1972 1 PP
78. EXECUTING BALM AND SETL AT N.Y.U. COURANT. R. PAIGE
SEPTEMBER 1972 2 PP
79. NO LONGER AVAILABLE.
80. ALGORITHMS IN THE SETL2 TEST PACKAGE. K. CURTIS
SEPTEMBER 1972 3 PP

81. MEMORY SIZE OF SETL RUNS.
SEPTEMBER 1972 1 PP J. SCHWARTZ
S. BROWN
82. TIMING COMPARISON BETWEEN SETL AND FORTRAN.
OCTOBER 1972 2 PP E. DESAUTELS
83. USER EXPERIENCE AND HUMAN FACTORS.
NOVEMBER 1972 16 PP J. SCHWARTZ
84. PLAN FOR A LIBRARY OF ALGORITHMS.
NOVEMBER 1972 18 PP J. SCHWARTZ
85. ESTIMATE OF MINIMUM RUNNING SIZE FOR THE NEXT SETL SYSTEM
(REVISION 1).
APRIL 1973 6 PP H. WARREN
86. PROPOSAL FOR A TEMPORARY, BUT EASILY IMPLEMENTED, SOFTWARE
PAGING SYSTEM.
NOVEMBER 1972 7 PP J. SCHWARTZ
87. WORKPLAN FOR THE NEXT PHASE OF SETL IMPLEMENTATION.
NOVEMBER 1972 7 PP J. SCHWARTZ
88. A SCHEME FOR BALMSETL MEASUREMENTS.
NOVEMBER 1972 2 PP J. SCHWARTZ
89. USER INFORMATION FOR LEXICAL SCAN SETUP PACKAGE.
NOVEMBER 1972 2 PP E. GUTH
T. POLACEK
90. PRELIMINARY REFLECTIONS ON THE USE OF SETL IN A DATA-BASE
CONTEXT.
DECEMBER 1972 18 PP J. SCHWARTZ

91. A GRAMMARLESS PARSE AND A RELATED METHOD OF RETRIEVAL BY
SIMILARITY. J. SCHWARTZ
DECEMBER 1972 24 PP
92. SOME EXPERIMENTS WITH SETLB PROGRAMS. K. CURTIS
JANUARY 1973 9 PP
93. A NOTE ON OPTIMIZATION AND PROGRAMMING STYLE IN SETL. K. CURTIS
JANUARY 1973 2 PP
94. AN ALGORITHM TO REPRESENT A COLLECTION OF SETS AS INTERVALS (ON
A LINE). G. JENNINGS
JANUARY 1973 9 PP
95. GENERALIZED NODAL SPAN PARSE ROUTINE, CORRECTED VERSION. Y. FEINROTH
JANUARY 1973 10 PP
96. POINTERS AND "VERY HIGH LEVEL LANGUAGES". M. MINSKY
JANUARY 1973 3 PP
97. SETL EXTENSIONS FOR OPERATING SYSTEM DESCRIPTION. P. MARKSTEIN
FEBRUARY 1973 24 PP
98. REFLECTIONS ON P. MARKSTEIN'S NEWSLETTER ON SETL EXTENSIONS FOR
OPERATING SYSTEM DESCRIPTION. J. SCHWARTZ
JANUARY 1973 9 PP
99. PAGING, THE QUICK AND DIRTY WAY.
(THIS IS ALSO EALM BULLETIN NO. 21) S. BROWN
JANUARY 1973 4 PP
100. MAKING SRTL DEEUGGING RUNS. H. WARREN
FEBRUARY 1973 11 PP

101. HOW TO PROGRAM IF YOU MUST (THE SETL STYLE).
R. BONIC
MARCH 1973 15 PP
102. REDUCTION IN STRENGTH USING HASHED TEMPORARIES.
K. KENNEDY
MARCH 1973 12 PP
103. PRELIMINARY PLAN FOR BALH-TO-LITTLE TRANSLATOR.
J. SCHWARTZ
APRIL 1973 8 PP
104. AN ALGORITHM TO REPRESENT A COLLECTION OF SETS AS A DIRECT
PRODUCT OF INTERVALS ON THE LINE. G. JENNINGS
MARCH 1973 9 PP
105. A SETL PROGRAM FOR A BASIC BLOCK OPTIMIZER AND AN EXTENDED BASIC
BLOCK OPTIMIZER. S. MARATECK
APRIL 1973 11 PP J. SCHWARTZ
106. USER VARIATION OF THE SEMANTICS OF FUNCTION AND SUBROUTINE
INVOCATION. G. JENNINGS
MAY 1973 3 PP
107. LINEAR FUNCTION TEST REPLACEMENT.
K. KENNEDY
MAY 1973 5 PP
108. APL - SETL, AN EXTENSION OF SETL ACHIEVED FROM USER VARIED
SEMANTICS. G. JENNINGS
MAY 1973 34 PP
109. FASTER EXECUTION FOR THE LITTLE BASED BALM SYSTEM.
S. BROWN
JULY 1973 4 PP
110. MORE ON SEMANTIC DEFINITION MATTERS.
J. SCHWARTZ
IN PROGRESS

111. GLOBAL DEAD COMPUTATION ELIMINATION.
AUGUST 1973 2 PP K. KENNEDY
112. AN ALGORITHM TO COMPUTE COMPACTED USE-DEFINITION CHAINS.
AUGUST 1973 8 PP K. KENNEDY
113. LITTLE CODE GENERATION FROM THE BALM COMPILER.
AUGUST 1973 10 PP S. BROWN
114. A SETL TO PUBLICATION SETL TRANSLATOR.
AUGUST 1973 7 PP A. GETZLER
115. A SETL REPRESENTATION OF THE MARYLAND GRAAL GRAPH-MANIPULATION
LANGUAGE.
AUGUST 1973 32 PP D. WEINBERGER
A. TENENBAUM
116. CATALOG OF SETL(C) NEWSLETTERS AS OF JULY 30, 1973.
(THIS IS ALSO SETL(C) NEWSLETTER 11.)
AUGUST 1973 5 PP A. FRSHOV ET AL
(NOVOSIBIRSK GROUP)

PART 3 - LITTLE NEWSLETTERS.

1. I/O CONVENTIONS AND PROPOSAL; QUOTED STRINGS; OCTAL CONSTANTS;
USER INFORMATION FOR IMPROVED MACROPROCESSOR.
OCTOBER 1971 8 PP A. STEIN
J. SCHWARTZ
2. FILES FOR THE LITTLE PROJECT.
OCTOBER 1971 3 PP D. GOLDBERG
3. POSSIBLE FUTURE EXTENSIONS TO LITTLE.
NOVEMBER 1971 16 PP J. SCHWARTZ
4. A "LITTLE" MACHINE.
NOVEMBER 1971 11 PP J. SCHWARTZ
5. USER INFORMATION CONCERNING THE LITTLE-TO-FORTRAN TRANSLATOR.
NOVEMBER 1971 3 PP J. SCHWARTZ
6. EXTENSION TO LITTLE TO IMPROVE CHARACTER STRING PROCESSING.
JANUARY 1972 3 PP D. SHIELDS
7. LITTLE FOR MINICOMPUTERS.
MARCH 1972 26 PP T. STUART
8. USE OF COMMENTS IN LITTLE.
MARCH 1972 2 PP D. SHIELDS
9. SOME SUGGESTIONS FOR SIMPLIFYING THE PREPARATION OF SETL AND
LITTLE TEXT: KEYBOARD AND LEXICAL MACROS. D. SHIELDS
MARCH 1972 6 PP
10. INTERSPERSING MACROS.
APRIL 1972 9 PP J. SCHWARTZ

- | | | |
|--|-------|------------------------------------|
| 11. INPUT / OUTPUT STATEMENTS FOR LITTLE. | | R. ABES
H. WARREN
E. MILGROM |
| APRIL 1972 | 21 PP | |
| 12. NEW CONVENTIONS FOR LITTLE: COMMENTS, USE OF SEMICOLON AS A
STATEMENT TERMINATOR. | | J. SHIELDS |
| JUNE 1972 | 2 PP | |
| 13. MACRO CAPABILITIES FOR STRUCTURED PROGRAMMING. | | R. ABES
H. WARREN |
| JULY 1971 | 15 PP | |
| 14. MASS STORAGE UTILIZATION IN LITTLE. | | P. MACLEAN |
| JULY 1972 | 9 PP | |
| 15. PARTIAL MULTI-WORD FACILITY FOR THE FORTRAN VERSION OF LITTLE. | | A. STEIN |
| JULY 1972 | 2 PP | |
| 16. SOME TIMING STATISTICS FOR LITTLE. | | D. SHIELDS |
| OCTOBER 1972 | 10 PP | |
| 17. TEST PACKAGES FOR THE LITTLE COMPILER. | | R. ABES |
| NOVEMBER 1972 | 1 PP | |
| 18. A NEW ARRAY OPTIMIZATION FOR BASIC BLOCKS. | | J. SCHWARTZ |
| NOVEMBER 1972 | 4 PP | |
| 19. LITTLE USER'S GUIDE | | I. BRENNER |
| MAY 1973 | 21 PP | |
| 20. REMARKS ON THE STRUCTURE OF THE SETL RUN TIME LIBRARY. | | D. SHIELDS |
| NOVEMBER 1972 | 5 PP | |

21. SOME PROPOSALS FOR IMPROVING THE ACCESSIBILITY OF THE LITTLE
COMPILER, D. SHIELDS
DECEMBER 1972 9 PP
22. EXAMPLES OF LITTLE-GENERATED CODE. D. SHIELDS
DECEMBER 1972 5PP
23. NAMESETS: A NEW WAY TO HANDLE GLOBAL VARIABLES IN LITTLE. D. SHIELDS
JANUARY 1973 6 PP
24. PROPOSALS FOR THE NEXT STAGE OF LITTLE DEVELOPMENT. D. SHIELDS
MARCH 1973 6 PP
25. PROPOSED EXTENSIONS TO LITTLE. D. SHIELDS
JUNE 1973 25 PP
26. PLAN FOR THE DEVELOPMENT OF A LITTLE COMPILER FOR THE BESM/6. -- CHERNOBROD
AUGUST 1973 3 PP
29. A MEDIUM-LEVEL SEMANTIC ENVIRONMENT BASED ON LITTLE. J. SCHWARTZ
SEPTEMBER 1973 20 PP

PART 4 - ADDITIONAL SETL DOCUMENTATION.

1. SET THEORY AS A LANGUAGE FOR PROGRAM SPECIFICATION AND
PROGRAMMING. J. SCHWARTZ
SEPTEMBER 1970 97 PP
2. ABSTRACT ALGORITHMS, AND A SET-THEORETIC LANGUAGE FOR THEIR
EXPRESSION. (THE "SETL MANUSCRIPT") J. SCHWARTZ
DECEMBER 1970 298 PP

PART 5 - BALM NEWSLETTERS.

1. INTRODUCTION.			1. HARRISON
JUNE 1971	3 PP		
2. THE MBALM MACHINE.			1. HARRISON
JUNE 1971	11 PP		
3. THE MBALM SIMULATOR ON THE CDC 6800.			5. BROWN
JUNE 1971	5 PP		
4. STATUS OF BALM4.0.			1. HARRISON
JUNE 1971	3 PP		
5. BALM4.0 SYSTEM LISTING.			1. HARRISON
JUNE 1971	18 PP		
6. ONGOING IMPROVEMENTS, MODIFICATIONS AND ASSOCIATED PROJECTS.			1. HARRISON
JULY 1971	2 PP		
7. SUGGESTIONS FOR NEW MBALM INSTRUCTIONS			1. HARRISON
JULY 1971	1 PP		
8. STATUS AUGUST 1971 AND SOME COMPARISONS OF BALM3 AND BALM4.			5. BROWN
AUGUST 1971	3 PP		
9. CHANGES WHICH ARE IN BALM4.1.			1. HARRISON
OCTOBER 1971	3 PP		
10. FASTER EXECUTION.			1. HARRISON
NOVEMBER 1971	10 PP		

- | | | | |
|---|----------------|------|--------------|
| 11. FACILITIES FOR NON-SEQUENTIAL PROCESSING. | | | 1. HARRISON |
| | NOVEMBER 1971 | 8 PP | |
| 12. BALM EDITOR. | | | 3. BROWN |
| | MARCH 1972 | 3 PP | |
| 13. SOME THOUGHTS ON THE USE OF BALM TO IMPLEMENT SETL. | | | 3. MILGROM |
| | JUNE 1972 | 7 PP | |
| 14. COMMENTS ON BULLETIN 13. | | | 1. HARRISON |
| | JUNE 1972 | 5 PP | |
| 15. PROBLEMS IN BALM4. | | | 1. HARRISON |
| | JULY 1972 | 3 PP | |
| 16. REAL NUMBERS IN BALM. | | | 3. BROWN |
| | SEPTEMBER 1972 | 5 PP | 2. MAURIELLO |
| 17. PAGING WITHIN BALM. | | | 1. HARRISON |
| | OCTOBER 1972 | 4 PP | |
| 18. PAGING PRIMITIVES. | | | 3. BROWN |
| | NOVEMBER 1972 | 2 PP | |
| 19. BALM ON THE XDS SIGMA V AND THE DEC PDP-10. | | | 3. BROWN |
| | NOVEMBER 1972 | 2 PP | |
| 20. NO LONGER AVAILABLE. | | | |

- | | | |
|---|-------|-------------|
| 21. PAGING, THE QUICK AND DIRTY WAY. | | S. BROWN |
| JANUARY 1973 | 4 PP | |
| 22. REFLECTIONS ON BALM. | | L. PEEFFER |
| JANUARY 1973 | 30 PP | |
| 23. LANGUAGE-ORIENTED INSTRUCTION SETS. | | H. HARRISON |
| FEBRUARY 1973 | 19 PP | |
| 24. MBALM-66 TRANSLATOR. | | R. PAIGE |
| MARCH 1973 | 49 PP | |
| 25. TOP-DOWN META-PARSER USER'S GUIDE. | | S. BROWN |
| SEPTEMBER 1973 | 19 PP | |

PART 6 - THE SETL(CYRILLIC) NEWSLETTERS.

THE SERIES OF NEWSLETTERS IN RUSSIAN CONCERNING SETL, BEING
WRITTEN AT THE NOVOSIBIRSK COMPUTING CENTER, IS DESIGNATED IN
THIS CATALOG AS THE SETL(CYRILLIC) OR SETL(C) SERIES.

1. PHASE 1 IMPLEMENTATION PROJECT.

9 PP

D. LEVIN
.. CHERNOBROD

2. A CONCEPTUAL REVIEW OF THE SET-THEORETIC LANGUAGE SETL.

41 PP

.. CHERNOBROD

3. LISPSETL USER'S MANUAL, VERSION 1.

25+21 PP

.. CHERNOBROD

4. THE BALM INPUT LANGUAGE OF THE SYSTEM BALM-BESM/6.

29 PP

D. LEVIN

5. THE SYSTEM BALM-BESM/6.

19+37 PP

D. LEVIN

6. SETL: SOURCE LANGUAGE OF AN EXPERIMENTAL IMPLEMENTATION.

22 PP

D. LEVIN

7. INTERNAL REPRESENTATION OF SETS AND AN EXPERIMENTAL IMPLEMENTA-
TION OF SET-THEORETIC OPERATIONS.

34 PP

D. LEVIN

8. THE SETLBALM SYSTEM AND A PRELIMINARY IMPLEMENTATION OF SETL.

10 PP

D. LEVIN

- | | |
|---|--|
| 9. DECOMPOSITION OF SETL PROGRAMS. | |
| 15 PP | D. LEVIN |
| 10. INTERACTION OF DATA TYPES. | |
| 30 PP | L. GORODNAYA |
| 11. CATALOG OF SETL(C) NEWSLETTERS 1 - 12.
(THIS IS ALSO SETL NEWSLETTER 116.) | |
| 3 PP | A. ERSHOV ET AL
(NOVOSIBIRSK GROUP) |
| 12. PARALLEL PROGRAMMING AND HIGH LEVEL LANGUAGES. | |
| 6 PP | A. MARINYANI |

PART 7 - THE SETL ALGORITHMS LIBRARY.

A LIBRARY OF SUBSTANTIAL, IMPORTANT ALGORITHMS CODED IN SETL^B CURRENTLY RESIDES ON THE FILE ALGORITHMSPL. THE ADDITION OF OTHER ALGORITHMS TO THIS LIBRARY, AND THE IMPROVEMENT OF THE DOCUMENTATION AND PERFORMANCE OF THE ALGORITHMS THAT HAVE BEEN ESTABLISHED, IS AN ONGOING PROJECT. CONTENTS ARE AS FOLLOWS.

1. DECK BINRES (413 CARDS) AN AUTOMATIC THEOREM PROVER OPERATING
DECK HYPRES (133 CARDS) ON STATEMENTS IN THE SENTENTIAL CAL-
CODER: E. SCHONBERG CULUS. PRODUCES SHORTEST PROOFS VIA
A BREADTH FIRST TREE SEARCH WHEN
THE BINARY RESOLUTION PRINCIPLE IS USED, OR LONGER PROOFS IN
LESS TIME WHEN HYPER-RESOLUTION IS EMPLOYED.
2. DECK TYPEVAR (543 CARDS) GIVEN THE GRAPH OF A PROGRAM AND SOME
CODER: K. ABDALI INFORMATION ABOUT ITS ASSIGNMENT
STATEMENTS, THIS ALGORITHM FINDS THE
TYPES THAT A VARIABLE CAN ASSUME DURING THE EXECUTION OF THE
PROGRAM. ONE OF THE MORE IMPORTANT SETL COMPILER OPTIMIZATIONS
WILL BE BASED ON EXPERIMENTATION WITH THIS ALGORITHM.
3. DECK MATCHUP (147 CARDS) A MODIFICATION OF MARSHALL HALL'S
CODER: G. WHITEHEAD ALGORITHM FOR THE MARRIAGE PROBLEM
WHICH WILL YIELD A MAXIMAL SYSTEM OF
DISTINCT REPRESENTATIVES (MAXIMAL MATCHING).
4. DECK TOPDATA (112 CARDS) A TOP DOWN PARSER AND ITS INPUT DATA;
DECK TOPDNA (236 CARDS) COMPLETE WITH A BOOTSTRAPPING META-
DECK TOPDWP (248 CARDS) COMPILER THAT OPERATES ON AN EXTENDED
CODER: S. MARATECK PACKUS NORMAL FORM DESCRIPTION OF THE
S. BROWN LANGUAGE.

5. DECK MCKENAN (531 CARDS) GENERATES THE MCKEYMAN TABLES (A
CODER: I. KAYE SERIES OF GENERALIZED PRECEDENCE
TABLES) USING BACKUS NORMAL FORM
GRAMMAR AS ITS INPUT. SAMPLE INPUT DATA IS INCLUDED.
6. DECK CHOMSNF (164 CARDS) REMOVES NULL VARIABLES FROM A CONTEXT
CODER: H. ANTHONY FREE INPUT GRAMMAR (DESCRIBED BY ITS
PRODUCTIONS) AND PUTS IT INTO CHOMSKY
NORMAL FORM. SAMPLE INPUT DATA IS INCLUDED.
7. DECK GENNSPF (478 CARDS) A GENERALIZED NODAL SPAN PARSER, WITH
DECK GENNSPD (7 CARDS) ATTRIBUTES. SAMPLE INPUT DATA IS
CODER: Y. FEINROTH INCLUDED.
8. DECK EULERGP (117 CARDS) A SETLB CODING OF L. EULER'S GRAPH
CODER: H. MULLISH TRACING ALGORITHM USUALLY ASSOCIATED
WITH THE BRIDGES OF KOENIGSBERG.
9. DECK LEXGENA (477 CARDS) THE INPUTS TO THIS MINI-SYSTEM ARE
DECK LEXGENP (65 CARDS) TABLES DESCRIBING THE CHARACTER SET,
DECK LEXGENC (43 CARDS) CHARACTER TYPES, AND ACTIONS TO BE
CODER: T. POLACEK TAKEN DURING THE LEXICAL SCAN OF AN
ARBITRARY LANGUAGE. THE OUTPUT IS A
FORTRAN PROGRAM WHICH IS A WORKING LEXICAL SCANNER FOR THE DE-
SCRIBED LANGUAGE, COMPLETE WITH TOKEN FILE AND ERROR MESSAGE
GENERATORS.
10. DECK HEURMAC (29 CARDS) FIVE COMPLETE INDEPENDENT HEURISTIC
DECK HEURA (202 CARDS) SEARCH PROCEDURES, MOSTLY DUE TO
DECK HEURB (376 CARDS) NILSSON, PRECEDED BY A DECK OF MACROS
DECK HEURC (91 CARDS) WHICH THEY ALL USE. THE ALGORITHMS
DECK HEURD (92 CARDS) ARE: A GENERAL PATH FINDER, A TREE
DECK HEURE (82 CARDS) SEARCH, A UNIFORM COST SEARCH, A
CODER: L. WELBER BREADTH FIRST SEARCH, AND A DEPTH
FIRST SEARCH.

11. DECK GPS (439 CARDS) A STRIPPED DOWN VERSION OF ERNST,
CODER: A. GETZLER NEWELL AND SHAW'S GENERAL PROBLEM
SOLVER PROGRAM, WITH A SAMPLE SPECI-
FICATION FOR THE "MONKEY AND BANANAS" PROBLEM.
12. DECK SCGRAPH (100 CARDS) TWO SEPARATE ALGORITHMS TO FIND THE
DECK PARTREE (124 CARDS) STRONGLY CONNECTED REGIONS OF A DI-
DECK BALANCE (239 CARDS) RECTED GRAPH. A PROGRAM TO GENERATE
CODER: W. TSUI THE PARTITIONS OF A NUMBER; A PROGRA
TO GENERATE ALL BINARY TREES. TWO
SEPARATE ALGORITHMS FOR ASSEMBLY LINE BALANCING.
13. DECK POLY (283 CARDS) A COLLECTION OF ROUTINES FOR THE
CODER: E. GUTH STANDARD ALGEBRAIC MANIPULATIONS OF
POLYNOMIALS. TEST INPUT IS INCLUDED
14. DECK GRAAL (651 CARDS) A SETL REPRESENTATION OF THE UNIVER-
CODER: G. WEINBERGER SITY OF MARYLAND GRAPH MANIPULATION
A. TENENBAUM LANGUAGE (GRAAL) OF RHEINHOLD, BASIL
AND MESZTENYI AS EXPLAINED IN SETL
NEWSLETTER 115. SAMPLE INPUT DATA IS INCLUDED.

PART 8 - THE SETL TEST PACKAGES.

A LIBRARY OF TEST PROGRAMS, CODED IN SETL-B, CURRENTLY RESIDES ON THE FILE SETLBTESTPACKAGES. THIS LIBRARY WAS ESTABLISHED TO SPOT BUGS IN COMPILER MODIFICATIONS, AND TO PROVIDE SOME STANDARDS FOR TIMING STUDIES. THE ALGORITHMS VARY WIDELY IN SIZE, CONTENT, AND CODING STYLE.

1. HUFFMAN (75 CARDS) - PRODUCES A HUFFMAN TREE AND TABLE FOR UNIQUE BIT STRING ENCODING GIVEN A SET OF CHARACTERS AND A FREQUENCY OF USE FUNCTION OVER THAT SET.
2. MISCPERM (50 CARDS) - CONTAINS SHORT PROGRAMS TO MAKE A SEQUENCE OUT OF A TUPLE; COMPOSE TWO FUNCTIONS INTO ONE; OBTAIN THE INVERSE OF A FUNCTION; OBTAIN THE CYCLE FORM OF A PERMUTATION; OBTAIN THE INVERSE OF A PERMUTATION; OBTAIN THE INVERSE OF A PERMUTATION GIVEN IN CYCLE FORM.
3. PERM (49 CARDS) - GENERATES ALL PERMUTATIONS OF N OBJECTS IN LEXICOGRAPHIC ORDER.
4. MEDIAN (132 CARDS) - FINDS THE K-TH NUMBER (IN ASCENDING ORDER) OF A GIVEN SET OF NUMBERS. THIS ALGORITHM, DUE TO FLOYD, ET AL IN 1971, RUNS IN LINEAR TIME AS A FUNCTION OF THE NUMBER OF ITEMS IN THE GIVEN SET.
5. POCKSORT (59 CARDS) - A RADIX SORT IN WHICH THE ITEMS TO BE SORTED AND THE RADIX ARE INPUT PARAMETERS.
6. TREEPRINT (193 CARDS) - PRINTS BINARY OR ORDERED TREES IN A TREE-LIKE FORMAT.
7. FORDJ (157 CARDS) - THE FORD-JOHNSON TOURNAMENT SORT ALGORITHM (A COMPLICATED MINIMUM COMPARISON SORT).
8. SETUP AND DSETUP (190 CARDS) - READS SETL CODE, AND PREPARES A STRING AND SOME TABLES FOR THE LEXICAL SCANNER.

9. INTPRINT (290 CARDS) - PRINTS THE FLOW-GRAPH OF A PROGRAM IN FLOWCHART-LIKE FORMAT GIVEN A SET OF PATHS AND A SET DEFINING THE ORDER IN WHICH TO PRINT THE NODES.
10. TWERGE (35 CARDS) - THE NATURAL TWO-WAY MERGE FOR FAST IN-CORE SORTING.
11. PRIMES (72 CARDS) - CONTAINS SHORT PROGRAMS TO GENERATE PRIMES BY THE SEIVE METHOD; GENERATE PRIMES DIRECTLY FROM THEIR DEFINITION; FIND THE PRIME FACTORS OF A GIVEN NUMBER.
12. PIGLATIN (27 CARDS) - STRING BREAKUP AND TRANSLATION VIA TABLE LOOKUP OR A PROGRAMMED ENGLISH-PIGLATIN DICTIONARY.
13. INSANITY (29 CARDS) - A BACKTRACKING ALGORITHM TO SOLVE THE INSTANT INSANITY (COLORED CUBES) PUZZLE.
14. NODSPAN (91 CARDS) - A NODAL SPAN PARSE ROUTINE WHICH CAN APPLY ANY PRODUCTION GRAMMAR IN CHOMSKY NORMAL FORM TO AN INPUT STRING.
15. PASCAL (16 CARDS) - A STRING MANIPULATION AND FORMATTING PROGRAM WHICH PRINTS PASCAL'S TRIANGLE NEATLY.
16. ERRAUT (104 CARDS) - CALCULATES THE STRUCTURE OF THE AUTOMATON ASSOCIATED WITH ERROR DETECTION IN $\sim LR \sim$ PARSING.
17. SPLASH (138 CARDS) - SOLVES ALL THE OLD BUCKET PROBLEMS (E.G. HOW TO GET 4 GALLONS OF WATER GIVEN A 3 AND A 5 GALLON BUCKET).
18. MAXFLOW (103 CARDS) - A PACKAGE TO FIND A PATH IN AN ORDERED GRAPH; DETERMINE THE MAXIMUM FLOW IN A NETWORK; AND APPLY THE MAXIMUM FLOW ALGORITHM TO THE MATCHING PROBLEM.

PART 9 - THE SETL ARCHIVES.

THE SETL ARCHIVES WERE CREATED 1/73 TO PROVIDE BACKUP FILES IN CASE OF PHYSICAL DISASTER. TO THIS END: TAPE 781 IS IN NEW JERSEY AND AVAILABLE FROM H. WARREN. TAPE 782 IS IN WEST-CHESTER AND AVAILABLE FROM F. ALLEN. TAPES 2025 AND 2026 ARE IN THE TAPE VAULT HERE AT COURANT. THE ARCHIVES ARE DESCRIBED HERE FOR THOSE WHO ARE CLOSELY INVOLVED IN ACTUAL IMPLEMENTATION WORK.

THE 38 ITEMS LISTED BELOW ARE FILES 1 - 38 ON TAPE 781 AND FILES 1 - 38 ON TAPE 782. ITEMS 1 - 17 ARE FILES 1 - 17 ON TAPE 2025. ITEMS 18 - 38 ARE FILES 1 - 21 ON TAPE 2026. EACH ITEM IS DESCRIBED BELOW IN A TWO LINE FORMAT. THE FIRST LINE GIVES THE ITEM NUMBER, THE CATALOG PROGRAM CHECKSUM, AND THE SOURCE OF THE ITEM (USUALLY, PERMANENT FILE NAME AND CYCLE NUMBER). THE SECOND LINE IS A QUICK VERBAL HANDLE TO WHAT THE ITEM IS. THE FILE SETLCODE3 IS AVAILABLE AS FILE 3 OF TAPE 694 AT COURANT, AND ALSO FROM K. MALY IN MINNEAPOLIS.

1. CATSUM=2243 PFN=SETLNSALGC CY=13
SETLB PROGRAM - FRONT END FOR NAME SCOPING ALGORITHMS.
2. CATSUM=37372 PFN=SRC1202 CY=61
BALM SETL SOURCE - CODE AND MANUAL.
3. CATSUM=113651 PFN=STOLCOMPL CY=1
SAME AS CYCLE 2 BEFORE RESEQUENCING.
4. CATSUM=137562 PFN=STOLCOMPL CY=2
SETL COMPILER IN LITTLE + SETL COMPILER IN SETL.
5. CATSUM=133566 PFN=STOLCOMPLI CY=1
SAME AS CYCLE 2 BEFORE RESEQUENCING
6. CATSUM=53751 PFN=STOLCOMPLI CY=2
SETL COMPILER IN LITTLE.

7. CATSUM=30015 PFN=TESTPL CY=1
MISCELLANEOUS OBSOLETE TEST PROGRAMS
8. CATSUM=3065 PFN=THEOREMPL CY=1
THEOREM PROVER IN SETL.
9. CATSUM=5562 PFN=TOPDOWNPL CY=10
TOP DOWN PARSER IN SETL.
10. CATSUM=54543 PFN=LDSLTLPL CY=7
SHORTENED LITTLE COMPILER IN FORTRAN.
11. CATSUM=20167 PFN=P4SOURCE CY=4
SOURCE CODE FOR SIMULATOR SYSTEM.
12. CATSUM=43240 PFN=P4SOURCE CY=12
SOURCE CODE FOR TRANSLATOR SYSTEM.
13. CATSUM=11316 PFN=PALM4BINARY CY=1
MBALM FILE OF THE PALM COMPILER SYSTEM.
14. CATSUM=122135 C1MLIB SET1174
SETL2 COMPILER IN FORTRAN.
15. CATSUM=37431 C1MLIB SLB1174
SUPPORT LIBRARY FOR SETL2 (INCLUDING METACOMPILER).
16. CATSUM=67250 C1MLIB BLM4SRC
BALM SOURCE FILE FOR PALM SYSTEM.
17. CATSUM=302175 TAPE 776 FILE 1
LITTLE TO FORTRAN TRANSLATOR.
18. CATSUM=3064 PFN=ASSGNV1 CY=8
FORTRAN UTILITY PROGRAM.
19. CATSUM=41247 PFN=CLEANLILLEXL CY=28
LITTLE LEXICAL SCANNER IN LITTLE - REFORMATTED.
20. CATSUM=3705 PFN=EDITSETUP CY=3
SETL PROGRAM YIELDING LEX SCANNER IN FORTRAN FOR ANY LANGUAGE.

21. CATSUM=45155 PFN=GENZZZZZ1174 CY=37
LITTLE TO SETLE COMPILER IN FORTRAN FOR OPTIMIZER USE.
22. CATSUM=64003 PFN=ILDSPL CY=6
MISCELLANEOUS SUPPORT AND UTILITY PROGRAMS.
23. CATSUM=27733 PFN=LITLITDOC1175 CY=22
DOCUMENTATION FOR LITTLE COMPILER IN LITTLE.
24. CATSUM=5625 PFN=LITTLELIRSOURCE CY=6
ASSEMBLER LANGUAGE UTILITY ROUTINES USED BY LITTLE COMPILER.
25. CATSUM=143672 PFN=LITTLEPL CY=1
OLD VERSION OF LITTLE COMPILER PROPER IN FORTRAN
26. CATSUM=26702 PFN=LITTLETESTPL CY=8
TEST PROGRAMS FOR THE LITTLE COMPILER.
27. CATSUM=36342 PFN=LTLASPLF CY=11
LITTLE ASSEMBLER IN FORTRAN
28. CATSUM=146455 PFN=LTLGENPLF CY=10
LITTLE COMPILER PROPER IN FORTRAN.
29. CATSUM=72750 PFN=LTLLEXPLF CY=16
LITTLE LEXICAL SCANNER AND MACRO PROCESSOR IN FORTRAN.
30. CATSUM=20566 PFN=LTLLOPTPL CY=5
OPTIMIZATION ROUTINES FOR LITTLE IN SETLB.

31. CATSUM=120223 PFN=LTLPL CY=10
LITTLE PARSER, CODE GENERATORS, PRINT UTILITY; ALL IN LITTLE.
32. CATSUM=126046 PFN=MANUALSPL CY=5
VARIOUS SETL AND LITTLE NEWSLETTERS, AND THE MANUALMAKER PROGRAM.
33. CATSUM=560 PFN=NEWS78 CY=1
GENESIS OF SETL NEWSLETTER 78.
34. CATSUM=235 PFN=NEWS79 CY=1
GENESIS OF SETL NEWSLETTER 79.
35. CATSUM=360 PFN=NEWTP CY=8
TYPE FINDING ALGORITHM IN SETL.
36. CATSUM=1176 PFN=PAR1 CY=2
TOP DOWN PARSER IN SETL.
37. CATSUM=20265 PFN=SETLRTESTPACKAGES CY=20
SEE PART 7 OF THIS DOCUMENT.
38. CATSUM=130623 PFN=SETLLIRPL CY=11
SETL RUN TIME LIBRARY IN LITTLE.

FRESH ARCHIVES WERE CREATED 9/73. TAPE 5 IS IN WESTCHESTER AND AVAILABLE FROM F. ALLEN. TAPE 6 IS IN LOS ALAMOS AND AVAILABLE FROM J. MORRIS. ANOTHER TAPE IS IN THE VAULT HERE AT COURANT. THE 40 ITEMS LISTED BELOW ARE FILES 1 - 40 ON EACH OF THESE TAPES. THE FIRST OF THE TWO LINES DESCRIBING EACH ITEM GIVES THE ITEM NUMBER, CIMLIB NAME, LAST CIMLIB MOD DATE, AND NUMBER OF WORDS.

- | | | |
|---|----------|-------|
| 1. TBALM4 | 09/11/73 | 10415 |
| THE BALM4 SYSTEM. | | |
| 2. SAVESETL | 09/11/73 | 39226 |
| THE BALM SETL SAVED FILE. | | |
| 3. SRC1208 | 09/11/73 | 10305 |
| THE BALM SETL SOURCE FILE. | | |
| 4. SNEWSPL | 09/14/73 | 63443 |
| SETL AND LITTLE MACHINE READABLE NEWSLETTERS. | | |
| 5. SLIBPL | 09/14/73 | 90708 |
| THE SETL RUN TIME LIBRARY. | | |
| 6. LEXPL | 09/17/73 | 21135 |
| LITTLE LEXICAL SCANNER IN LITTLE - SOURCE. | | |
| 7. GENPL | 09/17/73 | 24263 |
| LITTLE COMPILER IN LITTLE - SOURCE. | | |

8. ASMPPL 09/17/73 45235
LITTLE ASSEMBLER IN LITTLE - SOURCE.
9. LLIBPLF 09/17/73 9569
LITTLE RUN TIME LIBRARY FOR BOOTSTRAP COMPILER - SOURCE.
10. EDITSTL 09/17/73 8648
EDITING PROGRAM IN SETL.
11. UPDTSTL 09/17/73 5648
UPDATE PROGRAM IN SETL.
12. LMANUAL 09/05/73 3986
LITTLE USER'S MANUAL.
13. LLIBPL 09/05/73 10691
LITTLE RUN TIME LIBRARY IN LITTLE - SOURCE.
14. TOPDNPL 09/05/73 8330
TOP-DOWN METAPARSER - SOURCE.
15. TOPDOWN 09/05/73 26198
BINARY FOR ITEM 14.
16. GOLDPL 07/25/73 45468
A PREVIOUS ARCHIVING SYSTEM - SOURCE.
17. TAPE 746 07/25/73 6792
VARIOUS SYSTEMS PROGRAMS OF R. PAIGE.
18. TAPE 745 07/25/73 6531
CONTINUATION OF ITEM 17.
19. TAPE 749 07/25/73 17795
CONTINUATION OF ITEM 18.

- 20. LDSPL 07/10/73 45077
 VARIOUS SYSTEMS PROGRAMS OF D. SHIELDS.
- 21. LTLLEXF 07/10/73 30383
 BINARY FOR LITTLE LEXICAL SCANNER IN FORTRAN.
- 22. LTLLEX2 07/10/73 10664
 ANOTHER VERSION OF ITEM 21.
- 23. LTESTPL 05/25/73 11733
 LITTLE TEST PROGRAMS - SOURCE.
- 24. STLBPPL 05/15/73 42077
 SOURCE FOR FORTRAN EXECUTABLE PORTION OF THE SETL SYSTEM.
- 25. DLTPLPL 05/15/73 18449
 BOOTSTRAP UTILITY PROGRAMS.
- 26. LDSARC 05/15/73 25841
 SOURCE UTILITY PROGRAMS OF D. SHIELDS.
- 27. LDSLIB 05/15/73 25693
 CONTINUATION OF ITEM 26.
- 28. OGENPLF 05/15/73 31038
 OBSOLETE LITTLE COMPILER - SOURCE.
- 29. OASMPLEF 05/15/73 16105
 OBSOLETE LITTLE ASSEMBLER - SOURCE.

- | | | | |
|-----|---|----------|-------|
| 30. | ASIDENT | 05/16/73 | 10166 |
| | EDIT UPDATE INTERFACE. | | |
| 31. | SOAPSPL | 05/16/73 | 58123 |
| | SOAPSUDS OPERATING SYSTEM - SOURCE. | | |
| 32. | STESTPL | 05/16/73 | 8373 |
| | SETLB TEST PACKAGES. | | |
| 33. | SALGPL | 05/16/73 | 19118 |
| | SETLB ALGORITHMS - PROGRAM LIBRARY. | | |
| 34. | SNOPL | 05/16/73 | 695 |
| | SNOBOL PROGRAMS TO REFORMAT SETL PROGRAMS. | | |
| 35. | LOPTPL | 05/16/73 | 11452 |
| | OPTIMIZATION ROUTINES IN SETL. | | |
| 36. | SLBPL | 05/11/73 | 16153 |
| | THE SETLB LIBRARY - SOURCE. | | |
| 37. | CIMSPL | 05/11/73 | 13117 |
| | SOURCE DEFINING THE CURRENT ARCHIVING SYSTEM. | | |
| 38. | LEXPLF | 05/11/73 | 18769 |
| | LITTLE LEXICAL SCANNER IN FORTRAN. | | |
| 39. | GNEPLF | 05/11/73 | 25775 |
| | LITTLE COMPILER IN FORTRAN. | | |
| 40. | ASMPLE | 05/11/73 | 14146 |
| | LITTLE ASSEMBLER IN FORTRAN. | | |

NOV 16 1977 DATE DUE

JUN 27 1978

MAY 25 1977

MAY 21 1977

JUN 5 1982

APR 5 1981

APR 25 1980

GAYLORD

PRINTED IN U.S.A.

