

technical memorandum

Daresbury Laboratory

DL/CSE/TM 25

SYNCHROTRON RADIATION BIBLIOGRAPHY: MANAGER'S GUIDE

by

G.D. FIRTH, F. GIBB and J.C.C. SHARP, Daresbury Laboratory

JUNE, 1983

Science & Engineering Research Council

Daresbury Laboratory

Daresbury, Warrington WA4 4AD

© SCIENCE AND ENGINEERING RESEARCH COUNCIL 1983

Enquiries about copyright and reproduction should be addressed to:—
The Librarian, Daresbury Laboratory, Daresbury, Warrington,
WA4 4AD.

IMPORTANT

The SERC does not accept any responsibility for loss or damage arising from the use of information contained in any of its reports or in any communication about its tests or investigations.

CONTENTS

	<u>Page</u>
1. INTRODUCTION	2
2. DEVELOPMENT OF THE BIBLIOGRAPHY	2
3. SPECIFICATION FOR INPUTTING DATA	3
3.1 Introduction	3
3.2 Field Identifiers	3
3.3 Title Information	4
3.4 Authors, Editors and Compilers	4
3.5 Bibliographic Details	4
3.5.1 Journal citations	4
3.5.2 Books	5
3.5.3 Analytic entries	5
3.5.4 Reports	5
3.6 Language	5
3.7 Date	5
3.8 Keywords	6
3.9 Subject Code	6
3.10 Sample Input	6
4. ACCESSING THE DATABASE	7
4.1 SRSEDT	10
4.2 SRSINDX	12
4.3 SRKWC	12
4.4 SRKWC	13
4.5 SRSMULT	14
4.6 SRSSOXY	16
4.7 SRSPICK	16
4.8 SRSREF	17
4.9 SRSSOGA	18
4.10 SRSSRCH	19
4.11 SRSVOC	20
APPENDIX A STOP LIST	21
APPENDIX B SECTION HEADINGS	22
APPENDIX C JOURNAL ABBREVIATIONS	24
APPENDIX D REPORT CODES	31
REFERENCES	33

1. INTRODUCTION

SRSBIB is a computer based information system containing references on synchrotron radiation and related topics.

SRSBIB uses the FAMULUS suite of programs on the Daresbury Laboratory NAS AS/7000 computer. FAMULUS is an information storage and retrieval system which was originally developed at the Pacific South West Forest and Range Experimental Station (California) of the US Department of Agriculture in 1969. It was adapted and further developed at University College, London, and then implemented on the Rutherford Laboratory IBM 360/195's from where the version mounted on the NAS AS/7000 at Daresbury was obtained.

FAMULUS offers various information retrieval facilities, such as sorting, indexing, searching and catalogue production. Subsequent sections of this report describe the elements and structure of the database and the command procedures which may be used to access it.

2. DEVELOPMENT OF THE BIBLIOGRAPHY

"Synchrotron Radiation: a Bibliography" was first published in 1972⁽¹⁾ and represented the first attempt to review the whole field, including astrophysical applications. A supplement was issued in 1974⁽²⁾, since which time the rapid expansion in the number of synchrotron radiation related papers has led to a re-appraisal of the existing processing and retrieval system. The current system, using FAMULUS, has been jointly implemented by CSE and TSIS divisions. Major changes from the previous publications are:

- The expansion and restructuring of the main subject headings
- The restricted use of annotations
- The provision of microfiche copies of the complete bibliography
- The provision of 'on-demand' printouts of specific subjects
- Enhanced indexing and retrieval facilities

3. SPECIFICATION FOR INPUTTING DATA

3.1 Introduction

Input data for the FAMULUS program suite is stored in a series of files of the form

II.SBIBn.DATA

Where n is an integer indicating successive sets of new records.

To create a new file, enter the command:

EDIT SBIBn DATA ASIS NONUM NEW

To edit an existing file, enter the command:

EDIT SBIBn DATA ASIS NONUM

To separate entries within the dataset, a blank line should be inserted after the section code field. If a line of text for a particular field exceeds the limit of 80 characters then it must be entered as two or more lines. Each line must be filled to its capacity and each extra line begun in column 6. Where a word carries over from one line to the next do not insert a hyphen as columns 6-80 of successive cards for a field are treated as a continuous string of characters. If a word ends exactly at the end of a line it will of course be necessary to insert a space in column 6 before continuing the line.

3.2 Field Identifiers

The field identifiers used are as follows:

TITL
AUTH
CITA
LANG
DATE
KEYW
SECT

Field identifiers should always occupy the first four columns in a line, should always be typed in capitals, and should always be followed by a blank space. Field identifiers and associated text for each reference should always be input in the order given above. Fields for which there is no information for a particular entry should not be included.

3.3 Title Information

The title of a reference should be entered in the TITL field. Where possible an English translation of foreign language titles should be given. Although obvious spelling mistakes should be corrected, alternative spellings should be left unaltered. These will be catered for by making use of the synonym facility.

Greek letters should be translated and enclosed in single quotes.

e.g. K α -edges should be written:

K'alpha'-edges.

Other unusual symbols should be described as concisely as possible following precedents where available

e.g. \bar{h} should be written:

'h-bar'

Chemical formulae should be written giving subscripts precedence over superscripts

e.g. CO₂ should be written:

CO2-

3.4 Authors, Editors and Compilers

Authors, editors and compilers should be entered in the AUTH field. A semicolon is used to separate multiple authors. No other punctuation should be used within names. The preferred format for authors' names is SURNAME INITIALS ; SURNAME INITIALS.

i.e. James OR ; Knopf LU

Initials of Christian names should be reduced to their simplest form and any internal punctuation ignored.

i.e. Wang TH not Wang T-H

Ablikow Y not Ablikow Yb

This field should only be used for those authors etc. directly responsible for the reference. It should not be used in analytic entries, for example, for editors of books within which the reference appears.

3.5 Bibliographic Details

Bibliographic details should be entered in the CITA field.

3.5.1 Journal Citations

The prescribed format for journal citations is:

JOURNAL ABBREVIATION, vXX noXX/date (year) pX-X

i.e. Phys Bull, v22 no6 (1972) p3-8

or: Proc Roy Soc, v369 no8 (1973) p58-59

or: Phys Today, Mar (1972) p6-9

Parallel citations (eg for translated articles or preprints) should be separated by a semicolon. Journal abbreviations should be taken from the authority file (appendix A). Page numbers should be given as completely as possible, i.e. p58-59.

3.5.2 Books

The prescribed format for publishers' information is:

PLACE : PUBLISHER (DATE)

i.e.

New York : Plenum (1972)

3.5.3 Analytic Entries

The prescribed format for analytic entries is:

In: BOOK, AUTHORS/EDITORS/COMPILERS. PUBLISHER'S
INFORMATION (DATE) PXX-XX

i.e.

IN: Synchrotron Radiation, edited by B.Bolokov. New York :
Plenum (1972) p32-39

3.5.4 Reports

The prescribed format for report numbers is:

ACRONYM-REPORT NO.

i.e.

SSRL-REPORT-78-01

DL-SCI-P306A

Acronyms should be taken from the authority file (see appendix D).

3.6 Language

Language should be entered in the LANG field. This field should not be used if the language is English.

3.7 Date

The year of publication should be entered in the DATE field. Where

there are parallel citations the earliest date of publication should be used.

3.8 Keywords

Keywords are used to provide an enhanced description for those entries where the title of the reference is not sufficiently informative, and these should be entered in the KEYW field. A semicolon is used to separate keywords and/or keyword phrases. The prescribed format is:

KEYWORD KEYWORD ; KEYWORD

i.e.

plasma processes ; nebulae

3.9 Subject Code

The appropriate subject section code should be entered in the SECT field. A complete list of subject section codes is given in appendix B.

3.10 Sample Input

```
logon ii/machshov
edit sbibn data asis nonum
>input
TITL Synchrotron radiation in crab nebulae
AUTH James OR ; Knopf LU
CITA Rev Astron Proc, v369 no8 (1973) p58-59
LANG German
DATE 1974
KEYW plasma processes ; nebulae
SECT zza

TITL Synchrotron radiation processes reviewed
AUTH James OR ; Knopf LU
CITA J Synch Rad, v22 no6 (1973) p3-59
LANG German
DATE 1974
KEYW plasma processes ; nebulae
SECT zza
```

4. ACCESSING THE DATABASE

The following commands are available to access the SRS BIBLIOGRAPHY database:

SRSEDT - update the database.
SRSINDX - produce an index.
SRSKWIC - keyword in context index.
SRSKWOC - keyword out of context index.
SRSMULT - sorted print after field multiplication.
SRSOSSY - dump database in card image format.
SRSPICK - sorted print of selected entries.
SRSREF - print a reference listing.
SRSSOGA - sorted print of selected fields.
SRSSRCH - search for records meeting condition(s).
SRSVOC - vocabulary and statistics.

The commands reside in II.CLIST and a detailed description of each is given below. Most of the parameters used by the commands are common to all and wherever possible the parameters have been given default values which should suffice for the majority of cases tackled. When no sensible default for a parameter is available a positional parameter has been used (CF the keyword parameters used when a default is possible).

Common parameters are listed below, default values being given in brackets with an * taken to mean that while the parameter is common to several commands the default value is not.

ID(%U) - the ID used to identify the job submitted and the file of control cards. (NB the %U variable will take the value of the TSO session from which the job is submitted).
ACCT(%G) - the account number the job is to run under (NB %G causes the account number of the current TSO session to be substituted).
MIN(*) - the number of minutes CPU time given to the job.
SEC(*) - the number of seconds CPU time given to the job.
JOB(*) - used together with ID to give a job name (NB the total length of the job name must be no more than 8 characters).
FILE(*) - used to identify the file containing control statements for the job. The full file name is of the form

&ID..DATA(&FILE) for all commands except SRSEDT.

CLASS(A) - SYSOUT class for output - the default A causes all print to be in capital letters. Specify 5 to obtain a print in upper and lower case (NB class 5 output is usually only printed off overnight). If it is wished to route the output to a TSO terminal specify T and use the standard HOUT TSO command to examine the output when the job has run.

Note that for jobs with two steps some duplication of parameters is necessary, for instance two control files are needed. In these cases the standard parameters are used suffixed by a number.

Each command causes a batch job to be submitted to the Daresbury central computer, each job using one or more of the suite of programs which comprise the FAMULUS data management system. A full description of the FAMULUS programs is given in the FAMULUS User Guide⁽³⁾, the basic principle being that processing in each of the FAMULUS programs is controlled by means of a control file in which the FAMULUS commands are entered. All the default control files referred to in this section are members of the partitioned dataset (PDS) II.DATA. Further information on partitioned datasets can be found in the Daresbury Computer Users Guide chapters 2 and 5⁽⁴⁾. Note that control cards referred to in this section are really card images in disk files, not physical cards. If it is not possible to access the database in the way required by using one of the default sets of control cards then it will be necessary to create a new member of II.DATA containing the appropriate FAMULUS commands. If the new set of control cards is to be similar to an existing set then it is best to copy the old control cards to a new member of II.DATA and then edit this new member. The commands when logged on as user II are

```
COPY DATA(OLDMEMB) DATA(NEWMEMB)
```

```
EDIT (NEWMEMB) DATA ASIS
```

The dataset can now be edited in the normal manner (see Daresbury Computer User Guide Chapter 3). If the new control cards are not similar to an existing set then the commands when logged on as user II are

```
EDIT (NEWMEMB) DATA ASIS NEW NONUM
```

After which a prompt to type in the control cards is received. If the user id is not II then the commands are

```
COPY 'II.DATA(OLDMEMB)' 'II.DATA(NEWMEMB)'
```

```

EDIT 'II.DATA(NEWMEMB)' DATA ASIS
EDIT 'II.DATA(NEWMEMB)' DATA ASIS NEW NONUM
e.g.
EDIT (SRSFEL) DATA ASIS NONUM NEW
/ID/SRS BIBLIOGRAPHY
/FIELDS/(SECT)
/SEARCH/zzcbd

```

Once a new set of control cards has been created the FILE parameter of the appropriate clist command should be used to specify that the new file is to be used. For example if a new set of keyword in context control cards has been set up in II.DATA(SRSKWIC2) then a new keyword in context index can be produced by the command

```
SRSKWIC FILE(SRSKWIC2)
```

(assuming the user has id II). It is hoped that the ability to store sets of control cards will enable a comprehensive selection of standard reports to be readily available to the user.

For example, to set up a search for all the entries in section zzcbd the following control cards would be necessary, the appropriate commands to edit the dataset also being shown:

```

EDIT (SRSFEL) DATA ASIS NONUM NEW
/ID/SRS BIBLIOGRAPHY
/FIELD/(SECT)
/SEARCH/zzcbd

```

The command to submit the job which uses these control cards is

```
SRSSRCH FILE(SRSFEL)
```

Some of the more common FAMULUS commands are listed below, the standard format being:

```
/KEYWORD(S)/list
```

where KEYWORD(S) identifies the FAMULUS command to be used and 'list' is a parameter list supplied by the user (not all FAMULUS commands have parameters). Most of the FAMULUS programs use only a selection of the keywords described below. For all FAMULUS programs the first control card is compulsory and must be of the format:

```
/ID/title
```

Where title is the name of the database (SRS BIBLIOGRAPHY) and must be identical to the name stored in the FAMULUS master file. The title is out-

put as a page heading by all FAMULUS programs unless the /NEW ID/ parameter is used.

```
/NEW ID/title
```

Used to give a new title to the database or to specify a page heading different from the database title.

```
/FIELDS/(list of field names)
```

Used by the EDIT program to identify the fields within the database. Several of the other FAMULUS programs use the keyword to select field(s) on which special actions are required.

```
/DESCRIPTOR FIELD/(field name)
```

The field named is treated in a special manner by several of the programs.

```
/SELECT/(range)
```

To select specific records or record ranges from the database.

```
/STOP LIST/list
```

When producing, for instance, a KWIC index from the database there are many words such as A, THE etc which it is desirable to exclude as indexing terms; STOP LIST provides a means of doing this.

```
/GO LIST/list
```

Similar to STOP LIST but only those words specified in the GO LIST are used in creating indices etc.

4.1 SRSEEDIT

II.CLIST(SRSEEDIT) submits a batch job which can be used to add new records to the database and to amend or delete existing records within the database using the FAMULUS EDIT program. The job produces a new master file from the existing master file and the information contained in the file specified by the FILE parameter. When creating a new FAMULUS database this file must contain the following FAMULUS control cards at the beginning:-

```

/ID/SRS BIBLIOGRAPHY
/FIELDS/(TITL,AUTH,CITA,LANG,DATE,KEYW,SECT,X,XX,XXX)
/DESCRIPTOR FIELD/(TITL)(;)
/ORIGINAL/
/CITATIONS/

```

Followed by the input data in the format given in the section 'specification for inputting data to FAMULUS files'.

When adding records to an existing FAMULUS database this file must

contain the following FAMULUS control cards at the beginning:-

```
/ID/SRS BIBLIOGRAPHY
/CITATIONS/
```

Followed by the input data in the format given in section 3 (specification for inputting data to FAMULUS files). The /FIELDS/ and /DESCRIPTOR FIELD/ cards may optionally be included.

When editing database records the required control cards are:

```
/ID/SRS BIBLIOGRAPHY
/REPLACE/(record number)(field)*old text*new text*
```

e.g.

```
/ID/SRS BIBLIOGRAPHY
/REPLACE/(391)(AUTH)**Thomas RE*
```

When deleting database records the required control cards are:

```
/ID/SRS BIBLIOGRAPHY
/DELETE/(number,number,range)
```

e.g.

```
/ID/SRS BIBLIOGRAPHY
/DELETE/(20,30,40-78)
```

The clist has the positional parameter:

FILE - used to identify the file containing update information. The full name of the file is &ID.&FILE.&DATA .

The clist has the following keyword parameters, default values being given in brackets:-

```
ID(%U) - job and file ID.
ACCT(%G) - job account number.
CLASS(A) - job output class.
MIN(0) - job CPU time.
SEC(28) - job CPU time.
JOB(EDIT) - job name.
```

4.2 SRSINDX

II.CLIST(SRSINDX) submits a batch job in which the FAMULUS INDEX program produces an index to the database. The default control cards associated with the command will produce an author (AUTH) index, however an index may be produced from any field within the database. The control cards contained in the default control file are:-

```
/ID/SRS BIBLIOGRAPHY
/DESCRIPTOR FIELD/(AUTH){;}
```

Setting up a control file with, for example, SECT as the descriptor field would produce an index to the database on section. Note that the semicolon, known as the break character, after (AUTH) indicates to the INDEX program that for entries published by more than one author the authors names are separated by semicolons. If the break character is omitted then the index program will take any punctuation or blanks as break characters within the field.

The clist has the following keyword parameters

FILE(SRSINDX) - identifies the control card file.

```
ID(%U) - job and file ID.
ACCT(%G) - job account number.
CLASS(A) - job output class.
MIN(0) - job CPU time.
SEC(8) - job CPU time.
JOB(INDEX) - job name.
```

4.3 SRSKWIC

II.CLIST(SRSKWIC) submits a batch job which uses the FAMULUS KWIC program to produce a KWIC (Key Word in Context) index to the database. The default control cards associated with the command will produce a KWIC index from the title (TITL) field, however a KWIC index may be produced from any field or combination of fields in the database. The default control cards are:-

```
/ID/SRS BIBLIOGRAPHY
/FIELDS/(TITL)
/STOP LIST/A*a*the* -----
```

Setting up a control file with, for example, CITA (Citation) speci-

fied by the /FIELDS/ card would produce a keyword in context index to the database from the citation field. Note that all words specified in the STOP LIST will not be used as indexing terms. The STOP LIST will obviously increase in size as the database grows.

The clist has the following keyword parameters:-

FILE(SRSKWIC) - identifies the control card file.

ID(%U) - job and file ID.

ACCT(%G) - job account number.

CLASS(A) - job output class.

MIN(0) - job CPU time.

SEC(56) - job CPU time.

JOB(KWIC) - job name.

4.4 SRSKWOC

II.CLIST(SRSKWOC) submits a batch job to produce a KWOC (Key Word Out of Context) index to the database. The default control cards associated with the command will produce a KWOC from the title (TITL) and keyword (KEYW) fields, however, KWOC may be produced from any field or combination of fields in the database. The SRSKWOC command uses two of the FAMULUS programs, KEY and INDEX. It is therefore necessary to supply two sets of control cards, one for each program. Within the SRS BIBLIOGRAPHY database three work fields are defined: X, XX and XXX. It is recommended that one of these work fields is used in creating the KWOC index to pass the keywords generated by the KEY program to the INDEX program. In the default sets of control cards the work field used is X and provided this work field is always used the default control cards for the INDEX program should be sufficient for the majority of cases. The default control cards for the KEY program are:-

```
/ID/SRS BIBLIOGRAPHY
/FIELDS/(TITL,KEYW)
/DESCRIPTOR FIELD/(AUTH)(,)
/KEY FIELD/(X)(,)
/STOP LIST/a*the* -----
/SYNONYMS/ list
/PRINT/(200)
```

The field(s) identified by the /FIELDS/ card are the ones from which the key word index will be generated. The field indicated by the /KEY

FIELD/ card is the one in which keywords will be stored for reference by the INDEX program. The words listed after the /STOP LIST/ card will be omitted from the index. The /SYNONYMS/ card is used to enable the number of keywords in the index to be reduced. For example:-

```
/SYNONYMS/ ASTROPHYSICS=ASTROPHYSICAL
```

would cause entries containing the word astrophysical to be indexed under astrophysics. Note this facility can be used to overcome such difficulties as American spellings and words which are spelt the same but contain different combinations of upper and lower case letters. Note that the lists of words associated with the /STOP LIST/ and /SYNONYMS/ cards will be developed as the database expands and the lists shown with the default control cards are only examples, not the full lists which will be associated with the operational database.

The default control cards for the INDEX program are:-

```
/ID/SRS BIBLIOGRAPHY
/DESCRIPTOR FIELD/(X)(,)
```

Note that the field identified by the /DESCRIPTOR FIELD/ card must be the same as the field identified by the /KEY FIELD/ card of the KEY program.

The clist has the following keyword parameters:

```
FILE1(SRSWOC1) - identifies the control card file for the KEY program.
FILE2(SRSWOC2) - identifies the control card file for the INDEX program.
ID(%U) - job and file ID.
ACCT(%G) - job account number.
CLASS(A) - job output class.
MIN1(0) - CPU time for KEY program.
SEC1(4) - CPU time for KEY program.
MIN2(0) - CPU time for INDEX program.
SEC3(4) - CPU time for INDEX program.
JOB(KWIC) - job name.
```

4.5 SRSMULT

II.CLIST(SRSMULT) submits a batch job to produce a sorted print of the database after multiplication has been carried out on a specified field. The default control cards associated with the command will produce a print

of all journals and reports used in the citation (CITA) field, however a print may be produced of any field(s) in the database. The SRSMULT command uses three of the FAMULUS programs, MULTIPLY, SORT and GALLEY. It is therefore necessary to supply three sets of control cards, one for each program. The default control cards for the MULTIPLY program are:-

```
/ID/SRS BIBLIOGRAPHY
/DESCRIPTOR FIELD/(CITA);)
/PRINT/(0)
```

The field specified by the /DESCRIPTOR FIELD/ card is the multiplication field. The input file may be multiplied on one field only, but any field may be used. A record is generated in the output file (used as input to the sort step of the job) for each entry in the multiplication field (delimited by a ;).

The default control cards for the SORT program are:

```
/ID/SRS BIBLIOGRAPHY
/FIELDS/(CITA)
```

The file output by the SORT program is ordered on the fields identified by the /FIELDS/ card.

The default control cards for the GALLEY program are:-

```
/ID/SRS BIBLIOGRAPHY
/FIELDS/(CITA)
```

The fields identified by the /FIELDS/ card are printed.

The clist has the following keyword parameters:-

```
FILE1(SRSMULT1) - identifies the control card file for the MULTIPLY program.
FILE2(SRSMULT2) - identifies the control card file for the SORT program.
FILE3(SRSMULT3) - identifies the control card file for the GALLEY program.
ID(%U)          - job and file ID.
ACCT(%G)        - job account number.
CLASS(A)        - job output class.
MIN1(0)         - CPU time for MULTIPLY program.
SEC1(15)        - CPU time for MULTIPLY program.
MIN2(0)         - CPU time for SORT and GALLEY programs.
SEC2(42)       - CPU time for SORT and GALLEY programs.
```

JOB(MULT) - job name.

4.6 SRSSOXY

II.CLIST(SRSSOXY) submits a batch job which produces a card image dump of all or part of the database using the FAMULUS OSSIFY program. The dump is in the same format as input to the EDIT program and the main use of the command is to enable the database to be transferred to another computer, such as the Prime E at Rutherford where the data can be loaded into a STATUS database for online retrieval. This is what the default control cards associated with the command will give. The entries are dumped in the order in which they occur in the FAMULUS masterfile.

If the default control cards are not used then it is possible to specify ranges of entries to be dumped by means of the /SELECT/ card. The default control card is:-

```
/ID/SRS BIBLIOGRAPHY
```

The clist has the following keyword parameters:-

```
FILE(SRSSOXY) - identifies the control card file.
ID(%U)        - job and field ID.
ACCT(%G)      - job account number.
CLASS(A)      - job output class.
MIN(0)        - job CPU time.
SEC(29)       - job CPU time.
JOB(OSSY)     - job name.
GEN(0)        - Master file generation to be used.
```

4.7 SRSPICK

II.CLIST(SRSPICK) submits a batch job to produce a sorted print of a selected portion of the database. The default control cards associated with the command will produce a print of those references where the LANG field contains the word Russian in SECTION order. The SRSMULT command uses three of the FAMULUS programs, SEARCH, SORT and GALLEY. It is therefore necessary to supply three sets of control cards, one for each program. The default control cards for the SEARCH program are:

```
/ID/SRS BIBLIOGRAPHY
/FIELDS/(LANG)
/WRITE TAPE/
```

/SEARCH/Russian

The fields specified by the /FIELDS/ card are searched for the string(s) specified on the /SEARCH/ card. Complex logical conditions may be used in specifying the search. The /WRITE TAPE/ card signifies entries which meet the criteria are to be output to a file.

The default control cards for the SORT program are:-
/ID/SRS BIBLIOGRAPHY
/FIELDS/(SECT)

The file output by the SORT program is ordered on the fields identified by the /FIELDS/ card.

The default control cards for the GALLEY program are:-
/ID/SRS BIBLIOGRAPHY
/FIELDS/(SECT,AUTH,TITL,CITA,LANG)
/PRINT BY SUBJECTS/

The fields identified by the /FIELDS/ card are printed.

The clist has the following keyword parameters:-

FILE1(SRSPICK1) - identifies the control card file for the SEARCH program.
FILE2(SRSPICK2) - identifies the control card file for the SORT program.
FILE3(SRSPICK3) - identifies the control card file for the GALLEY program.
ID(%U) - job and file ID.
ACCT(%G) - job account number.
CLASS(A) - job output class.
MIN1(0) - CPU time for SEARCH program.
SEC1(10) - CPU time for SEARCH program.
MIN2(0) - CPU time for SORT program.
SEC2(18) - CPU time for SORT program.
JOB(PICK) - job name.

4.8 SRSREF

II.CLIST(SRSREF) submits a batch job which produces a print of all or part of the database using the FAMULUS GALLEY program. The main use of the command is to produce a reference listing of all entries in the database. This is what the default control cards associated with the command will

give. The entries are printed out in the order in which they were added to the database, and the reference number printed alongside each corresponds to the number(s) listed with each term in the index listings (author index, KWOC etc).

If the default control cards are not used then it is possible to specify ranges of entries to be printed by means of the /SELECT/ card. It is also possible to achieve a print in the same format as that produced by the EDIT program if a /PRINT BY FIELDS/ card is supplied. The default control card is:-

/ID/SRS BIBLIOGRAPHY

The clist has the following keyword parameters:-

FILE(SRSREF) - identifies the control card file.
ID(%U) - job and file ID.
ACCT(%G) - job account number.
CLASS(A) - job output class.
MIN(0) - job CPU time.
SEC(9) - job CPU time.
JOB(REP) - job name.

4.9 SRSSOGA

II.CLIST(SRSSOGA) submits a batch job which produces a sorted print of the database. Control cards for the SORT and GALLEY programs which are executed are supplied as in-stream data when the job is submitted rather than as separate data files. The field on which the print is sorted and the fields to be printed are parameters of the command. The field on which the output is sorted is always chosen as one of the fields to be output (note that this field is a positional parameter of the command and a name must always be supplied). The default is to print the title (TITL), citation (CITA) and keyword (KEYW) fields in addition to the sort field. However, any combination of the other fields in the database may be chosen instead of the defaults.

The clist has one positional parameter:

FIELD - the field on which the output is to be sorted.

The clist has the following keyword parameters:

PRINT1(TITL) - PRINT1, PRINT2 and PRINT3 are the fields
 PRINT2(CITA) - to be printed in addition to the sort field.
 PRINT3(KEYW) -
 ID(%U) - job and file ID.
 ACCT(%G) - job account number.
 CLASS(A) - job output class.
 MIN(0) - job CPU time.
 SEC(28) - job CPU time.
 JOB(KWIC) - job name.

e.g.

SRSSOGA AUTH

Would produce a print sorted on author name with the AUTH, TITL, CITA, and KEYW fields displayed.

4.10 SRSSRCH

II.CLIST(SRSSRCH) submits a batch job which will cause the database to be searched for any entries which meet the criteria specified on the /SEARCH/ card in the control file. Entries meeting the criteria are printed out. Obviously the control cards in the default control file only specify a search which will be rarely required and the purpose of this default file is to serve as an example. The default control cards are:

/ID/SRS BIBLIOGRAPHY
 /FIELDS/(LANG)
 /SEARCH/Russian

The /FIELDS/ card specifies which field(s) is/are to be searched and the /SEARCH/ card specifies what is to be looked for in the field(s). For a full description of the criteria which may be specified on the /SEARCH/ card the user is referred to the FAMULUS User Guide⁽³⁾. Note - you must specify exactly the combination of upper and lower case letters you wish to search for.

The clist has the following keyword parameters:-

FILE(SRSSRCH) - identifies the control card file.
 ID(%U) - job and file ID.
 ACCT(%G) - job account number.
 CLASS(A) - job output class.

MIN(0) - job CPU time.
 SEC(8) - job CPU time.
 JOB(SRCH) - job name.

4.11 SRSVOC

II.CLIST(SRSVOC) submits a batch job which produces statistics on the vocabulary of the database. The default control cards will produce statistics on vocabulary in the title (TITL) field, however statistics on any field or combination of fields in the database may be produced. The control cards contained in the default control file are:

/ID/SRS BIBLIOGRAPHY
 /FIELDS/(TITL)
 /VOCABULARY/A

The /FIELDS/ card specifies on which field(s) statistics are to be produced and the /VOCABULARY/ card specifies which words are to be omitted from the statistics. Note that due to a program error the /VOCABULARY/ card must always specify at least one word.

FILE(SRSVOC) - identifies the control card file.
 ID(%U) - job and file ID.
 ACCT(%G) - job account number.
 CLASS(A) - job output class.
 MIN(0) - job CPU time.
 SEC(28) - job CPU time.
 JOB(COUNT) - job name.

APPENDIX A

STOP LIST

With certain of the FAMULUS programs, such as FAMKWIC, it is possible to specify a STOP LIST of trivial words which are not to be used for indexing purposes. The words listed below are included in the SRS BIBLIOGRAPHY stop list.

A AN ANALYSIS AND APPLICATIONS AS AT
 BETWEEN BY
 CHARACTERISTICS
 DISTRIBUTION
 FOR FROM
 IN INVESTIGATION ITS
 MEANS MEASUREMENT MEASUREMENTS METHOD MOVING
 NEW
 OBSERVATION OF ON
 POSSIBLE PROPERTIES
 RADIATION
 STUDIES STUDY SYNCHROTRON
 THE TO
 USE USING
 WITH

APPENDIX B

SECTION HEADINGS

The bibliography is divided into the sections indicated below.

ZZA GENERAL

ZZB THEORY
 ZZBA SYNCHROTRON RADIATION THEORY : GENERAL
 ZZBB SYNCHROTRON RADIATION THEORY : POLARISATION PROPERTIES

ZZC SYNCHROTRON SOURCES
 ZZCA MACHINE PHYSICS
 ZZCB SYNCHROTRON RADIATION FACILITIES
 ZZCBA SYNCHROTRONS
 ZZCBB STORAGE RINGS
 ZZCBC WIGGLERS, SPECIAL DEVICES
 ZZCBD FREE ELECTRON LASERS

ZZD INSTRUMENTATION
 ZZDA MONOCHROMATORS
 ZZDB DETECTORS
 ZZDC EXPERIMENTAL APPARATUS
 ZZDD COMPUTING : CONTROL/DATA ACQUISITION/DISPLAY ETC
 ZZDE OTHER BEAMLINE COMPONENTS

ZZE EXPERIMENTAL APPLICATIONS
 ZZEA ATOMIC AND MOLECULAR ABSORPTION SPECTROSCOPY
 ZZEB COMPTON SCATTERING
 ZZEC EXAFS, XANES
 ZZED FLUORESCENCE, LUMINESCENCE
 ZZEE INFRA-RED SPECTROSCOPY
 ZZEF LIFETIME MEASUREMENTS
 ZZEG MODULATION SPECTROSCOPY (ELECTROREFLECTANCE)
 ZZEH NUCLEAR RESONANCE SPECTROSCOPY
 ZZEI PHOTOELECTRON SPECTROSCOPY
 ZZEJ PHOTOEMISSION/ESCA

ZZEK PHOTOIONISATION ; ATOMS, MOLECULES AND IONS
 ZZEL RADIOMETRY ; METROLOGY
 ZZEM RESONANCE RAMAN SCATTERING
 ZZEN SMALL ANGLE SCATTERING
 ZZEO SURFACE EXAFS
 ZZEP TIME RESOLVED SPECTROSCOPY
 ZZER X-RAY DIFFRACTION
 ZZES X-RAY DIFFUSE SCATTERING
 ZZET X-RAY INTERFEROMETRY
 ZZEU X-RAY LITHOGRAPHY
 ZZEV X-RAY MICROSCOPY ; MICRORADIOGRAPHY
 ZZEW X-RAY TOPOGRAPHY
 ZZEX OTHER APPLICATIONS (e.g. Radiation Damage,
 X-ray Holography, etc.)

ZZF PLASMAS

ZZG ASTROPHYSICS AND SYNCHROTRON RADIATION

ZZGA ASTROPHYSICS ; THEORY
 ZZGB TERRESTRIAL SOURCES
 ZZGC JUPITER
 ZZGD OTHER PLANETS
 ZZGE SOLAR PHYSICS
 ZZGF STELLAR PHYSICS
 ZZGG CRAB NEBULA
 ZZGH GALACTIC AND OTHER EXTRAGALACTIC SOURCES

APPENDIX C

JOURNAL ABBREVIATIONS

A set of journal abbreviations has been developed and the authority list is given below

ACTA CRYSTALLOGRAPHICA A	ACTA CRYST A
ACTA PHYSICA AUSTRIACA	ACTA PHYS AUST
AIAA JOURNAL	AIAA J
AIP CONFERENCE PROCEEDINGS	AIP CONF PROC
AMERICAN JOURNAL OF PHYSICS	AM J PHYS
ANNALES DE PHYSIQUE	ANN DE PHYS
ANNALS OF PHYSICS	ANN PHYS
ANNUAL REVIEW OF BIOPHYSICS AND BIOENGINEERING	ANN REV BIOPHYS AND BIOENG
ANNUAL REVIEW OF NUCLEAR SCIENCE	ANN REV NUCL SCI
APPLIED OPTICS	APPL OPT
APPLIED PHYSICS	APPL PHYS
APPLIED PHYSICS B	APPL PHYS B
APPLIED PHYSICS LETTERS	APPL PHYS LETT
ASTRONOMICHESKII ZHURNAL	ASTRON ZH
ASTROPHYSICS AND SPACE SCIENCE	ASTROPHYS AND SPACE SCI
ASTROPHYSICAL JOURNAL	ASTROPHYS J
ATOMIC DATA AND NUCLEAR DATA TABLES	AT DATA AND NUCL DATA TABS
ATOMNAYA ENERGIYA	AT ENERG
ATTI DELL ACCADEMIA NAZIONALE DEI .LINCEI RENDICONTI	ATTI ACCAD NAZ LINCEI REND
AUSTRALIAN JOURNAL OF PHYSICS	AUST J PHYS
BELL SYSTEM TECHNICAL JOURNAL	BELL SYST TECH J
BERICHTE DER BUNSEN-GESELLSCHAFT FUR PHYSIKALISCHE CHEMIE	BER BUNSENGES PHYS CHEM
BULLETIN OF THE ACADEMY OF SCIENCES OF THE USSR: PHYSICAL SERIES	BULL ACAD SCI USSR PHYS SER
BULLETIN OF AMERICAN PHYSICAL SOCIETY	BULL AM PHYS SOC
BULLETIN OF THE CANADIAN ASSOCIATION OF PHYSICS	BULL CAN ASSOC PHYS

BULLETIN OF THE ELECTROTECHNICAL LABORATORY	BULL ELECTROTECH LAB
CANADIAN JOURNAL OF PHYSICS	CAN J PHYS
CERN COURIER	CERN COURIER
CESKOSLOVENSKY CASOPIS PRO FYSIKU	CESK CA FYS
CHEMICAL AND ENGINEERING NEWS	CHEM AND ENG NEWS
CHEMICAL PHYSICS	CHEM PHYS
CHEMICAL PHYSICS LETTERS	CHEM PHYS LETT
CHIMIA	CHIMIA
CHINESE JOURNAL OF PHYSICS	CHIN J PHYS
CIRCULARS OF THE ELECTROTECHNICAL LABORATORY	CIRC ELECTROTECH LAB
COMMENTS ON ATOMIC AND MOLECULAR PHYSICS	COMM AT MOL PHYS
COMMENTS ON PLASMA PHYSICS AND CONTROLLED FUSION	COMM PLASMA PHYS AND CONT FUSION
COMMENTS ON SOLID STATE PHYSICS	COMM SOLID STATE PHYS
COMMUNICATIONS IN PHYSICS	COMMUN PHYS
COMPTE RENDOUS DES SEANCES HEBDOMADAIRE DE L'ACADEMIE DES SCIENCES	COMP REND
CONTEMPORARY PHYSICS	CONTEMP PHYS
COSMIC RESEARCH	COSMIC RES
CZECHOSLOVAK JOURNAL OF PHYSICS B	CZECH J PHYS B
DOKLADY AKADEMII NAUK SSSR	DOKL AKAD NAUK SSSR
DOPOVIDI AKADEMIYI NAUK UKRAYINSKOYI RSR SERIYA A	DOP AKAD NAUK UKR RSR SER A
ELEKTRONIKA	ELEKTRONIKA
EUROPHYSICS NEWS	EUROPHYS NEWS
FRA FYSIKKENS VERDED	FRA FYS VERD
FYSISK TIDSSKRIFT	FYS TIDSSKR
IBM TECHNICAL DISCLOSURE BULLETIN	IBM TECH DISCLOSURE BULL
IEEE JOURNAL OF QUANTUM ELECTRONICS	IEEE J QUANT ELECTRON
IEEE TRANSACTIONS ON ELECTRONIC DEVICES	IEEE TRANS ELECTRON DEVICES
IEEE TRANSACTIONS ON MAGNETICS	IEEE TRANS MAG
IEEE TRANSACTIONS ON NUCLEAR SCIENCES	IEEE TRANS NUCL SCI
INDUSTRIAL RESEARCH AND DEVELOPMENT	IND RES DEV
INDIAN JOURNAL OF PHYSICS B	INDIAN J PHYS B
INFRARED PHYSICS	INFRARED PHYS
INSTRUMENTS AND EXPERIMENTAL TECHNIQUES	INSTRUM AND EXP TECH

INTERNATIONAL JOURNAL OF INFRARED AND MILLIMETER WAVES	INT J INFRARED AND MILLIM WAVES
INTERNATIONAL JOURNAL FOR RADIATION PHYSICS AND CHEMISTRY	INT J RADIAT PHYS AND CHEM
INTERNATIONAL JOURNAL OF THEORETICAL PHYSICS	INT J THEOR PHYS
IZVESTIYA AKADEMII NAUK ARMYANSKOI FIZIKA	IZV AKAD NAUK ARM SSR FIZ
IZVESTIYA AKADEMII NAUK SSSR SERIYA FIZIKA	IZV AKAD NAUK SSSR SER FIZ
IZVESTIYA VYSSHIKH UCHEBNIKH ZAVEDENII FIZIKA	IZV VUZ FIZ
IZVESTIYA VYSSHIKH UCHEBNIKH ZAVEDENII RADIOFIZIKA	IZV VUZ RADIOFIZ
JOURNAL DE CHIMIE PHYSIQUE ET DE PHYSIOCHIMIE BIOLOGIQUE	J CHIM PHYS AND PHYSIOCHIM BIOL
JOURNAL DE MICROSCOPIE ET DE ELECTRONIQUE	J MICROSC AND SPECTROSC ELECTRON
JOURNAL DE PHYSIQUE	J DE PHYS
JOURNAL DE PHYSIQUE COLLOQUES	J DE PHYS COLLOQ
JOURNAL OF APPLIED CRYSTALLOGRAPHY	J APPL CRYST
JOURNAL OF APPLIED PHYSICS	J APPL PHYS
JOURNAL OF CHEMICAL PHYSICS	J CHEM PHYS
JOURNAL OF ELECTRON SPECTROSCOPY AND RELATED PHENOMENA	J ELECTRON SPECTROSC AND REL PHENOM
JOURNAL OF LUMINESCENCE	J LUMIN
JOURNAL OF MOLECULAR SPECTROSCOPY	J MOL SPECTROSC
JOURNAL OF MOLECULAR STRUCTURE	J MOL STRUCT
JOURNAL OF NON-CRYSTALLINE SOLIDS	J NON-CRYST SOLIDS
JOURNAL OF PHYSICS B	J PHYS B
JOURNAL OF PHYSICS C	J PHYS C
JOURNAL OF PHYSICS E	J PHYS E
JOURNAL OF PHYSICS F	J PHYS F
JOURNAL OF PHYSICS LETTERS	J PHYS LETT
JOURNAL OF QUANTITATIVE SPECTROSCOPY AND RADIATIVE TRANSFER	J QUANT SPECTROSC AND RADIAT TRANS
JOURNAL OF RESEARCH OF THE NATIONAL BUREAU OF STANDARDS A	J RES NAT BUR STAND A

JOURNAL OF THE AMERICAN CHEMICAL SOCIETY	J AM CHEM SOC
JOURNAL OF THE OPTICAL SOCIETY OF AMERICA	J OPT SOC AM
JOURNAL OF THE PHYSICAL SOCIETY OF JAPAN	J PHYS SOC JAPAN
JOURNAL OF THE SPECTROSCOPIC SOCIETY OF JAPAN	J SPECTROSC SOC JAPAN
JOURNAL OF VACUUM SCIENCE AND TECHNOLOGY	J VAC SCI TECHNOL
JAPANESE JOURNAL OF APPLIED PHYSICS	JAP J APPL PHYS
KOSMICHESKIE ISSLEDOVANIA	KOSM ISSLED
KAVANTOVAIA ELEKTRONIKA MOSKVA	KVANTELEKTRON MOSK
KYUSHU DIAGAKU KOGAKU SHUHO	KYUSHU DIAGAKU KOGAKU SHUHO
LASER FOCUS	LASER FOCUS
LASER UND ELEKTRO-OPTIK	LASER UND ELECTRO-OPT
LETTERE AL NUOVO CIMENTO	LETT NUOVO CIM
METROLOGIA	METROLOGIA
MOSAIC	MOSAIC
MOSCOW UNIVERSITY PHYSICS BULLETIN	MOSC UNIV PHYS BULL
NATURE	NATURE
NEDERLANDS TIJDSCHRIFT VOOR NATUURKUNDE	NED TIJD NAT
NEW PHYSICS	NEW PHYS
NEW SCIENTIST	NEW SCI
NUCLEAR INSTRUMENTS AND METHODS IN PHYSICS RESEARCH	NUCL INSTRUM AND METH
NUCLEAR PHYSICS B	NUCL PHYS B
NUOVO CIMENTO B	NUOVO CIM B
OPTICA ACTA	OPT ACTA
OPTICS AND LASER TECHNOLOGY	OPT AND LASER TECHNOL
OPTICS AND SPECTROSCOPY	OPT SPECTROSC
OPTICS COMMUNICATIONS	OPT COMMUN
OPTICS LETTERS	OPT LETT
OPTIKA I SPEKTROKOPIIA	OPT SPEKTROSK
OPTIK	OPTIK
OYO BUTSURI	OYO BUTSURI
PARTICLE ACCELERATORS	PART ACCEL
PHILOSOPHICAL MAGAZINE	PHIL MAG
PHILOSOPHICAL MAGAZINE A	PHIL MAG A
PHILOSOPHICAL MAGAZINE B	PHIL MAG B
PHOTOCHEMISTRY AND PHOTOBIOLOGY	PHOTOCHEM PHOTOBIOLOG

PHYSIKALISCHE BLATTER	PHYS BL
PHYSICS BULLETIN	PHYS BULL
PHYSICA FENNICA	PHYS FENN
PHYSICS LETTERS A	PHYS LETT A
PHYSICS OF FLUIDS	PHYS FLUIDS
PHYSICS REPORTS	PHYS REP
PHYSICAL REVIEW	PHYS REV
PHYSICAL REVIEW A	PHYS REV A
PHYSICAL REVIEW B	PHYS REV B
PHYSICAL REVIEW D	PHYS REV D
PHYSICAL REVIEW LETTERS	PHYS REV LETT
PHYSICA SCRIPTA	PHYS SCR
PHYSICA STATUS SOLIDI B	PHYS STAT SOL B
PHYSICS TEACHER	PHYS TEACH
PHYSICS TODAY	PHYS TODAY
PHYSICA B AND C	PHYSICA B AND C
PIS'MA V ZHURNAL EKSPERIMENTAL'NOI I TEORITICHESKOI FIZIKI	PISMA ZH EKSP AND TEOR FIZ
PIS'MA V ZHURNAL TEKNICHESKOI FIZIKI	PISMA ZH TEKH FIZ
PLASMA PHYSICS	PLASMA PHYS
PRAMANA	PRAMANA
PRIBORY I TEKHNIKA EKSPERIMENTA	PRIB TEKH EKSP
PRIRODA	PRIRODA
PROCEEDINGS OF THE NATIONAL ACADEMY OF SCIENCES OF THE UNITED STATES OF AMERICA	PROC NAT ACAD SCI USA
PROCEEDINGS OF THE ROYAL INSTITUTE OF GREAT BRITAIN	PROC ROY INST
PROCEEDINGS OF THE ROYAL SOCIETY OF LONDON	PROC ROY SOC LOND A
PROCEEDINGS OF THE SOCIETY OF PHOTO-OPTICAL INSTRUMENTATION ENGINEERS	PROC SOC PHOTO OPT INSTRUM ENG
PROGRESS IN QUANTUM ELECTRONICS	PROG QUANT ELECTRON
PTB MITTEILUNGEN	PTB MITT
RADIOISOTOPES	RADIOISOTOPES
RADIOTEKHNIKA I ELEKTRONIKA	RADIOTECH I ELEKTRON
RECHERCHES	RECHERCH

REPORT OF THE ACADEMY OF SCIENCES OF THE USSR	REP ACAD SCI USSR
REPORTS ON PROGRESS IN PHYSICS RESEARCH AND DEVELOPMENT	REP PROG PHYS RES DEV
REVIEW OF SCIENTIFIC INSTRUMENTS	REV SCI INSTRUM
REVIEWS OF MODERN PHYSICS	REV MOD PHYS
REVUE DE PHYSIQUE APPLIQUEES	REV PHYS APPL
RIGAKU-DENKI JANARU	RIGAKU-DENKI JANARU
SCIENCE REPORTS OF TOHOKU UNIVERSITY SCIENCE	SCI REP TOHOKU UNIV SCIENCE
SCIENTIFIC AMERICAN	SCI AM
SLAC BEAM LINE	SLAC BEAM LINE
SOLID STATE COMMUNICATIONS	SOLID STATE COMMUN
SOLID STATE PHYSICS	SOLID STATE PHYS
SOVIET ASTRONOMY	SOV ASTRON
SOVIET ATOMIC ENERGY	SOV AT ENERG
SOVIET JOURNAL OF ATOMIC ENERGY	SOV J AT ENERG
SOVIET JOURNAL OF NUCLEAR PHYSICS	SOV J NUCL PHYS
SOVIET JOURNAL OF QUANTUM ELECTRONICS	SOV J QUANT ELECTRON
SOVIET PHYSICS DOKLADY	SOV PHYS DOKL
SOVIET PHYSICS JOURNAL	SOV PHYS J
SOVIET PHYSICS JETP	SOV PHYS JETP
SOVIET PHYSICS - TECHNICAL PHYSICS	SOV PHYS TECH PHYS
SOVIET PHYSICS - USPEKHI	SOV PHYS USP
SOVIET TECHNICAL PHYSICS LETTERS	SOV TECH PHYS LETT
SPECTROCHIMICA ACTA A	SPECTROCHIM ACTA A
SURFACE SCIENCE	SURF SCI
TECHNOLOGY REPORTS OF KYUSHU UNIVERSITY	TECHNOL REP KYUSHU UNIV
TECHNOLOGY REPORTS OF OSAKA UNIVERSITY	TECHNOL REP OSAKA UNIV
TECHNICAL REPORTS OF THE ISSP SERIES A TIMES	TECH REP ISSP SER A TIMES
TIMES HIGHER EDUCATION SUPPLEMENT	TIMES HIGHER ED SUPPL
UKRAYINSKI FIZYCHNYI ZHURNAL	UKR FIZ ZH
USPEKHI FIZYCHYI NAUK	USP FIZ NAUK
VACUUM	VACUUM
VESTNIK MOSKOVSKII UNIVERSITET SERIES A : FIZIKA ASTRONOMIYA	VESTN MOSK UNIV FIZ ASTRON
VESTNIK AKADEMII NAUK SSSR	VESTN AKAD NAUK SSSR

VIDE	VIDE
WISSENSCHAFTLICHE ZEITSCHRIFT FREIDRICH- SCHILLER UNIVERSITAT JENA	WISS Z FREIDRICH-SCHILLER UNIV JENA MATH NATURWISS
MATHEMATISCH NATURWISSEN- SCHAFTLICHE REIHE	
WULI	WULI
YADERNYA FISIKA	YAD FIZ
ZEITSCHRIFT FUR ANGEWANDTE PHYSIK	Z ANGEN PHYS
ZEITSCHRIFT FUR PHYSIK B	Z PHYS B
ZHURNAL EKSPERIMENTALNOI I TEORETICHESKOI FIZIKI	ZH EKSP AND TEOR FIZ
ZHURNAL PRIKLADNO SPECTROSKOPII	ZH PRIKL SPECTROSK
ZHURNAL TEKNICHESKOI FIZIKI	ZH TEKH FIZ

APPENDIX D

REPORT CODES

The following list of report codes are included in the bibliography:

ZENTRALSTELLE FUER ATOMKERN ENERGIE-DOKUMENTATION	AED
BROOKHAVEN NATIONAL LABORATORY	BNL
BROWN UNIVERSITY	BUP
CAMBRIDGE ELECTRON ACCELERATOR LABORATORY	CEAL
CENTRE EUROPEEN DE RECHERCHES NUCLEAIRES	CERN
CORNELL UNIVERSITY LABORATORY OF NUCLEAR STUDIES	CLNS
CORNELL UNIVERSITY	CU
DEUTSCHES ELEKTRONEN SYNCHROTRON	DESY
DARESBURY LABORATORY	DL
DARESBURY NUCLEAR PHYSICS LABORATORY	DNPL
EREVAN INSTITUTE OF PHYSICS	EFI
ELECTRON POSITRON INTERSECTING COMPLEX	EPIC
EUROPEAN	EUR
CENTRE D'ETUDES NUCLEAIRES, SACLAY	FRNC
INSTITUTE OF ATOMIC ENERGY	IAE
INTERNATIONAL ATOMIC ENERGY AGENCY	IAEA
INSTITUTE FOR HIGH ENERGY PHYSICS, SERPUKHOV	IHEP
ISTITUTO NAZIONALE DI FISICA NUCLEAIRE	INFN
INTERNATIONAL NUCLEAR INFORMATION SYSTEM	INIS
INSTITUTE FOR NUCLEAR STUDIES, TOKYO	INS
ISTITUTO SUPERIORE DI SANITA	ISS
GOSUDARSTVENNY I KOMITET PO ISPOL'ZOVANIYU ATOMNO	ITEF
JOINT INSTITUTE FOR NUCLEAR RESEARCH	JINR
KERNFORSCHUNGSANLAGE JUELICH	JUEL
NATIONAL LABORATORY FOR HIGH ENERGY PHYSICS, JAPAN	KEK
KHARKOV FIZIKO-TEKHNICHESKII INSTITUT	KFTI
KHARKOV FIZIKO-TEKHNICHESKII INSTITUT	KFTII
LOS ALAMOS SCIENTIFIC LABORATORIES	LA
LINEAR ACCELERATOR LABORATORY, ORSAY	LAL
LAWRENCE BERKELEY LABORATORY	LBL
LABORATORIO NAZIONALI DI FRASCATI	LNF
MAX PLANCK INSTITUT	MPI

RUTHERFORD LABORATORY	RL
UNIVERSITY OF WASHINGTON	RLO
STANFORD LINEAR ACCELERATOR CENTER	SLAC
SYNCHROTRON RADIATION SOURCE, DARESBURY	SRS
STANFORD SYNCHROTRON RADIATION LABORATORY	SSRL
STANFORD SYNCHROTRON RADIATION PROJECT	SSRP
UNIVERSITY OF CALIFORNIA	UCID
UNIVERSITY OF CALIFORNIA, LOS ANGELES	UCLA
UNIVERSITY OF CALIFORNIA, RADIATION LABORATORY	UCRL
UNIVERSITY OF HAWAII	UH

REFERENCES

- (1) G.V. Marr, I.H. Munro and J.C.C. Sharp, Daresbury Report DNPL/R24 (1972).
- (2) G.V. Marr, I.H. Munro and J.C.C. Sharp, Daresbury Internal Report, DL/TM 127 (1974).
- (3) G.D. Firth, Daresbury Internal Report, DL/CSE/TM 20 (1982)
- (4) Daresbury Laboratory Computer Users Guide. Available from Daresbury Laboratory User Interface Group.

