

A USER'S GUIDE TO ADLIB

PART I

James Nagy
John S. Fisher
Robert C. Kohberger
John W. Wilkinson

Operations Research and Statistics
School of Management

Rensselaer Polytechnic Institute
Troy, New York

FWI Report 73-4 /

A USER'S GUIDE TO ADLIB

PART I

James Nagy
John S. Fisher
Robert C. Kohberger
John W. Wilkinson

Operations Research and Statistics
School of Management

Rensselaer Polytechnic Institute
Troy, New York

Research supported in part by the Eastern Deciduous Forest Biome, U.S. - International Biological Program, funded by the National Science Foundation under Interagency Agreement AG-199, 40-139-69, with the Atomic Energy Commission - Oak Ridge National Laboratory.

NOTICE: This memo report contains information of a preliminary nature prepared primarily for internal use in the US-IBP Eastern Deciduous Forest Biome program. This information is not for use prior to publication unless permission is obtained in writing from the authors.

A USER'S GUIDE TO ADLIB

PART I

Introduction

ADLIB is a series of programs for bibliographic retrieval and data manipulation and analysis. The first part of this manual describes the bibliographic retrieval section of ADLIB. Part II will discuss the data manipulation and analysis section of ADLIB. Abstracts currently on the system describe data sets that are filed on the databank. It is possible that in the future, abstracted journal articles and books may be stored.

In order to use ADLIB, the time sharing system (currently ALPHA) and the command syntax of ADLIB must be understood. This manual will give all the information that is needed to use the ADLIB System.

ENTERING THE SYSTEM

The RPI computer may be accessed either with teletypes or IBM 2741 type devices. Any device that is compatible with teletypes or 2741's may be used. The procedure is different for each of these devices, and will be explained in different sections. Common to both of these systems is the need for terminating a line of input and sending it to the computer. On 2741's this is done by depressing the "RETURN" key; on teletypes by simultaneously depressing the "CNTRL" key and the "S" key (this is called CNTRL-S). These actions will cause a line of input to be sent to the computer, and reposition the typing mechanism at the first printing position. After a line of input has been typed on the device (2741 or teletype), "RETURN" or "CNTRL-S" must be depressed.

PROCEDURE FOR 2741's:

First make sure the device is on and the switch on the side of the cabinet is set to "COM" (not "LCL"). Depress the "TALK" button on the data set and dial the number:
(518) 274-8001.

The computer will answer with a high pitched tone. When this tone is heard, depress the "DATA" button on the data set and replace the phone in the cradle. After this has been completed, hit the "RETURN" key. The computer will then type out:

COMNET/ALPHA AT RPI, TROY, NEW YORK
PLEASE ENTER: USERID, PASSWORD, USER

(1)

On line (1) you will type:

SRES10,NURDU\$,NAGY

The Computer will answer:

SRES10/NAGY ON 4 AT 12:01:23, 03/28/73

Those items underlined will change depending on when the system is accessed. At this point you are entered on the ALPHA timesharing system. Either upper or lower case letters may be typed on the 2741. If a mistake is made in typing, by depressing the "BACKSPACE" key the typing mechanism will move and those letters will be erased.

TELETYPES

The number to dial for all teletype devices is:

(518) 273-9445

For ASR 33 (or KSR 35) with an acoustic coupler the dial-up procedure is as follows. Make sure the device is on and the switch set to line. If switches are available they should be set to "HALF" (duplex) and "ORIGIN". Dial the above number. When the computer answers place the phone in the data set. Wait for the green light to come on (indicating a successful connection) and the type cylinder to nod, then type "CNTRL-S". The procedure from this point is the same as with a 2741 (with the exception of "RETURN" and "CNTRL-S"). It should be noted that only upper case letters are used on a teletype. If a letter is incorrectly typed, by typing "CNTRL-H" you may erase it. One depression of "CNTRL-H" will erase one letter. The typing mechanism will not actually move as in the case of a 2741.

For other styles of teletypes, check the devise's manual for dial-up procedures.

PROGRAM EXECUTION

To execute the ADLIB programs the following line must be entered:

EXE CUTE,ACCT=(1101,,5),DD=ADLIBJCL,TYPE=GAS,MSGL=(1,1)

The ALPHA system will respond with:

JOB 7T SUBMITTED

The underlined portion of this message is the jobname the system has given the program. After a short wait the system will say:

7T STARTED

The ADLIB system will then begin to send you messages, and you will be communicating with the ADLIB programs. Occasionally, when the computer is overloaded, the wait between the submission of a job and when it starts may seem excessive. There are three ALPHA commands which will give you an indication of how long the wait will be.

- DIS N : will tell you the number of users on the ALPHA system
- STA : will tell you the number of jobs waiting to be executed
- STA 7T : will tell you the disposition of your job, i.e., where it is in the line of jobs to be executed

The larger the number of users and the more jobs on the job queue, the longer the wait will be.

ADLIB SYNTAX

When your job has started, the ADLIB system will type:

```

FWI/ADLIB AT RPI, TROY, N.Y.
PLEASE ENTER USERID:
XXXXXXXXX

```

You must then wait for the system to say:

7T INPUT?

You then type in your last name. It is important to remember to wait for the message asking for input before typing in a

line. ADLIB will then ask:

ARE YOU FAMILIAR WITH THE ADLIB RETRIEVAL SYSTEM (YES/NO)
7T INPUT?

If you type in "YES" you will be immediately able to search abstracts. If you type in "NO" you will receive a message describing the various commands of the ADLIB system. When the system responds with: 7T INPUT?, you are ready to begin searching and printing abstracts.

ADLIB COMMANDS

OPEN

These commands need no password to be used. As will be seen, certain commands need passwords before they can be used. These passwords are available from the authors of this manual. Abstracts may be searched and printed without any password. The commands that need passwords are those that input and remove abstracts from the main file. Typical users will have no need to use these commands. In the following discussion braces -{}- indicate logical groupings while brackets -[]- indicate that a choice must be made between the contained variables.

1. SEARCH

Searches may be made of authors and/or subject categories (processes) and/or keywords. The syntax is:

@SEARCH { [AUTHOR=
SUBCAT=
KEYWRDS=] ([qualifier 1], [qualifier 2],...), { REPEAT } }

If more than one line is needed a trailing comma should be typed. The system will then ask "MORE:" and the remaining search parameters entered.

EXAMPLES:

@SEARCH AUTHOR=SMITH,SUBCAT=METEROLOGY

All abstracts having SMITH as a author and dealing with meterology will be found.

@SEARCH AUTHOR=SMITH,SUBCAT=METEROLOGY, KEYWRDS=(RAINFALL)

All abstracts having SMITH as a author, dealing with meterology and keyworded as rainfall will be found.

@SEARCH AUTHOR=(SMITH,JONES)

All abstracts having SMITH and JONES as authors will be found.

@SEARCH AUTHOR=SMITH,SUBCAT=(AQUATIC DECOMPOSITION),

MORE: } system supplied
7T INPUT? }
KEYWRDS=(NITROGEN,PHOSPHORUS)

This is an example of line continuation. Note the trailing comma after DECOMPOSITION. All abstracts having SMITH as an author, subject category of DECOMPOSITION, and keywords of NITROGEN and PHOSPHORUS will be found.

@SEARCH SUBCAT=HYDROLOGY

All abstracts of the subject category of hydrology will be found.

After the search is completed, ADLIB will either say no abstracts were found meeting the specification or it will give the abstract names of those that meet the specifications. Typical responses from ADLIB to a search are:

1. NO ABSTRACT MEETS THE SPECIFICATION(S).

2. THE FOLLOWING ABSTRACT(S) WERE FOUND:

000000007BC1001 00000000000BA102

2. PRINT

The print command will print an entire abstract. The syntax is:

@PRINT (abstract 1, ...abstract n)

EXAMPLE:

@PRINT (7BC1001,BA102)

ADLIB will respond by printing both of these abstracts.

NOTE: Leading zeroes may be omitted.

3. HELP

By specifying a command name, ADLIB will respond with a message describing the syntax of that command. The syntax is:

@HELP {command - name}

If no command name is specified, a general description of the system will be given.

EXAMPLE:

@HELP PRINT

ADLIB will respond by printing a description of the command.

4. END

The syntax is: @END

This command causes the program to cease execution.

ADLIB will respond by typing:

BYE!

After this message is received, the ALPHA system is in control. By now typing "BYE" the ALPHA system will hang up the phone line and remove the user from the time sharing system. Do not forget to turn off the device.

PASSWORD PROTECTED

These commands, in general, deal with inputting and removing abstracts from the file. These commands need to be protected so that the integrity of the abstract file may be maintained.

These ADLIB commands are not of interest to typical users. These commands are of interest primarily to programmers and people who must input abstracts to the main file. The responsibility for inputting abstracts is with the data management group at Rensselaer Polytechnic Institute. Further information about the system may be found in EDFB Memo Report 72-62-ADLIB (Nagy, Kohberger, and Wilkinson).

1. PRIME NUMBER DEFINITION

This command defines the prime numbers which will be used to determine the abstract's name.

```
@DEFINE { AUTHOR=
          SUBCAT=
          KEYWRDS= } qualifier, prime number
```

EXAMPLE:

```
@DEFINE AUTHOR=SMITH,17
```

2. INPUT

This command first gives the qualifiers upon which the abstract name is based and then it generates the process by which the abstract is typed in the system. The syntax is:

```
@INPUT {the same as SEARCH}
```

After this command is entered, ADLIB will then print the various fields on the Data Set Documentation Form. The input (from the abstract) is then entered. When the field is completed, a "@@" is typed and ADLIB will then ask for the next field.

EXAMPLE:

```
@INPUT AUTHOR=SMITH,SUBCAT=HYDROLOGY,KEYWRDS=(STREAMFLOW,
RAINFALL)
```

```
<DATATITL>
7T INPUT?
STREAMFLOW AND RAINFALL FROM LAKE GEORGE
7T INPUT?
@@
```

<INVESTIG>
7T INPUT?
SMITH, W.B.
7T INPUT?
@@
etc.

NOTES:

1. If the qualifiers in INPUT have been previously defined, they need not be redefined with the DEFINE command. All qualifiers must be defined or the INPUT command will give an error message that some of the qualifiers are not defined.
2. If a field in the abstract is blank, type "@@" and it will not be printed by the PRINT command.

3. REMOVING FILES

This command is used to remove files from the abstract file. The syntax is:

@UNFILE {abstract 1, ..., abstract n}

4. WAIT

This command will set the program in the wait state for a specified time. It is useful if several jobs are running on the terminal at once. The syntax is:

@WAIT HH:MM:SS