

instructions for

ADDRESS FILE GENERATOR

by Steve Owens

INTRODUCTION

The Address File Generator program is the first of a family of programs utilizing the power of the Apple II Disk Operating System (DOS). The program allows the system user to create, manipulate, and use four different types of name and address files.

- | | |
|------------------|----------------------------|
| 1) Holiday File | 3) Home Address File |
| 2) Birthday File | 4) Commercial Address File |

The program is self-prompting. This feature allows a user to learn the system in a very short time.

The following documentation is broken into four sections.

- | | |
|---------------------|-------------------------|
| a) File Description | c) Program Operation |
| b) Menu Description | d) Loading Instructions |

a) FILE DESCRIPTION

This section describes the different file structures used by the program. The Address File Generator has one main file and three subordinate files. The main file contains the actual name and address records. The record lengths vary depending on the type of file. Each file type has a different number of fields. Even though each field has a maximum length of thirty characters the total number of characters in a record must not exceed the maximum length set for that type of file. This restriction need not be a problem because fields such as City, State, Zip Code, and Phone Number use only a small amount of characters.

The following describes each file type available.

- 1) Holiday File
This file consists of the following fields: Last Name, First Name, Street, City, State, Zip, and Miscellaneous. The maximum record length for this file is 127 characters. This file can be used for Christmas card lists, etc.
- 2) Birthday File
This file consists of the following fields: Last Name, First Name, Street, City, State, Zip, Phone Number, and Birthday. The maximum record length for this file is 131 characters. This file can be used for important dates, such as Birthdays, Anniversaries, etc.
- 3) Home Address File
This file consists of the following fields: Last Name, First Name, Street, City, State, Zip, Phone Number, Comments, and Miscellaneous. The maximum record length for this file is 169 characters. This file can be used for simple address files.
- 4) Commercial Address File
This file can be used with complex addresses sometimes found with commercial establishments. This type of file consists of eleven fields: Name 1, Name 2, Attention Of, Box #, Street, City, State, Zip, Phone Number, Product, and Miscellaneous. The maximum record length for this file is 222 characters.

Each of the previously mentioned files will also create up to three subordinate files. These subordinate files have the same name as the main file with a suffix attached to make them unique.

The first subordinate file has the suffix ".H". This file contains one record. The record is created when the CREATE FILE command is used and contains information used by the program to set-up processing for a particular file type. The fields in this record contain the following information: a) Date - last date the file was accessed, b) File Type - Holiday, Birthday, Home, or Commercial, c) Record Number - of next available blank record, d) Record Length, and e) Header Information for video display such as, L. NAME, F. NAME, STREET, etc. The program automatically updates this record when needed.

The second subordinate file has the suffix ".W". This file is used by the program to speed-up search operations. The program creates and maintains this file automatically. For every record in the main file there is a corresponding record in this file. Each record is a string composed of the first two characters of each field in the main file record. The whole file is in memory at all time except during sort operations.

The third file is called the HIT file. It is created by the Search and Sort routines. This file allows the user to work with portions of the main file during Sort and Display operations. This file has the suffix ".S".

b) MENU DESCRIPTION

The Address File Generator program contains a menu of seven operational functions which are:

- 1) CREATE FILE
This operation initializes and builds new files.
- 2) ADD TO FILE
This operation adds new entries to the file following the last previous entry.
- 3) EDIT FILE
This operation allows an entry to be changed or deleted.
- 4) DISPLAY FILE
This operation allows two types of video display (normal or compressed). It also allows the user to format output to a hard copy printer.
- 5) SEARCH FILE
This operation allows the user to display, edit, or isolate a portion of the file. Using a search argument supplied by the user this operand works only on those records which match the argument.
- 6) SORT FILE
This operation sorts the file into ascending sequence. The user can specify up to three fields (of choice) to sort on.
- 7) REORGANIZE FILE
This operation permanently removes deleted records and compresses the file.

c) PROGRAM OPERATION

The following pages contain a detailed and graphic description of the operation of this program.

The words in **LARGE TYPE** represent the characters displayed on the video screen.

The words in *italic type* represent the description or response to the specific information indicated.

POWERSOFT, INC.
PRESENTS

ADDRESS FILE GENERATOR

BY

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PLEASE ENTER TODAY'S DATE IN ANY FORMAT
YOU CHOOSE : (A)

(A) The date entered will be written to the ".H" file.

Example of the Main Menu

ADDRESS FILE GENERATOR

MENU

- 1 - CREATE FILE
- 2 - ADD TO FILE
- 3 - EDIT FILE
- 4 - DISPLAY FILE
- 5 - SEARCH FILE
- 6 - SORT FILE
- 7 - REORGANIZE FILE
- 9 - END PROGRAM

?

CREATE FILE

PLEASE SUPPLY FILENAME (B)

(B) Enter name of file here.

If you type in the filename all previous files will be closed and the file just entered will be opened. The ".W" file will be read into memory. This message will be displayed at the beginning of each operation.

If the file is already opened and in memory just press the return key without entering the filename. This will save time as the files expand. If you press the return key and a file has not been previously opened then the program will repeat this message.

CREATE FILE

- 1 - HOLIDAY CARD LIST
- 2 - BIRTHDAY LIST
- 3 - GENERAL HOME ADDRESS FILE
- 4 - COMMERCIAL ADDRESS FILE

PLEASE CHOOSE FILE TYPE ? (C)

(C) *This response will inform the program of the type of file that is to be created. Choose the file format which best suits your needs. Remember the smaller formats such as Holiday Card List or Birthday List will allow you to put more address records on a diskette.*

Create File

CREATE HOLIDAY CARD LIST

(1) # 2 4/1/79 (2)
L NAME :
F NAME :
STREET :
(3) CITY :
STATE :
ZIP :
MISC :

=====
(4) ENTER L NAME :

(5) PRIOR (SMITH)

(6) TYPE '^' TO COPY PRIOR ITEM
HIT 'RETURN' TO ENTER NEW DATA

- (1) Current Record Number
- (2) Date File Was Last Accessed
- (3) Field Names
- (4) Field Currently Being Entered
When the return key is pressed the data is placed into the corresponding field in (3).
- (5) Data In Previous Record (of the corresponding field)
- (6) This saves keying if the data from the previous record is to be repeated in the current record.

DOES DATA NEED TO BE CORRECTED (Y/N)
? (7)

- (7) A response of "Y" initiates the correction routine. A response of "N" will cause the record to be written to disk. A message "MORE RECORDS TO BE CREATED FOR FILE (Y/N)" will be displayed. A response of "Y" will set-up the screen for the next record. A response of "N" will return the user to the Menu.

Correction Routine

CREATE HOLIDAY CARD LIST

2 4/1/79
L NAME : >JONNES
F NAME : JOHN
STREET : 6502 APPLESEED LANE
CITY : APPLEVILLE
STATE : CA
ZIP : 99999
MISC : CHRISTMAS CARD

=====

PRESS 'RETURN' UNTIL '>' IS ON LINE TO
BE CORRECTED. REKEY ENTRY HIT RETURN

*This correction routine allows the user to correct a
keying error before the record is written to the disk.*

*Note: If the user wants to clear a field just type a
"/" as the first and only character of the cor-
rection line when the ">" is on the line to be
corrected.*

*After all corrections have been made keep press-
ing the return key until the message "DOES DATA
NEED TO BE CORRECTED (Y/N)" reappears.*

Edit File

EDIT HOLIDAY CARD LIST

3 4/2/79
L NAME : JONES
F NAME : JOHN
STREET : 6502 APPLESEED LANE
CITY : APPLEVILLE (1)
STATE : CA
ZIP : 99999
MISC : CHRISTMAS CARD

=====

IF YOU HIT RETURN WITHOUT A RECORD
NUMBER THEN YOU WILL BE RETURNED TO THE
MENU
RECORD NUMBER ? 3 (2)

CHANGE OR DELETE (C/D) ? (3)

(1) Data In Record Number Three

(2) Here You Tell The Program Which Record Is To
Be Edited

(3) If you respond with "D" then the record will
be flagged as deleted, but will not actually
be removed from the disk until the Reorganize
Routine is called from the Menu.

*The change routine works exactly like the pre-
viously described correction procedure.*

When the Display operand is invoked the following message will be displayed.

DISPLAY FILE

PLEASE CHOOSE ONE OF THE FOLLOWING
DISPLAY OPTIONS:

- 1 - VIDEO
- 2 - PRINTER

The printer routine assumes the use of the Apple II printer interface card.

Video Options

DISPLAY FILE

PLEASE CHOOSE ONE OF THE FOLLOWING
VIDEO OPTIONS:

- 1 - DISPLAY ENTIRE FILE NORMAL MODE
- 2 - DISPLAY HIT FILE NORMAL MODE
- 3 - DISPLAY ENTIRE FILE COMPRESSED
- 4 - DISPLAY HIT FILE COMPRESSED

Normal Display Format

DISPLAY HOLIDAY CARD LIST

1 4/2/79
L NAME: SMITH
F NAME: JOHN
STREET: 6502 MEMORY LANE
CITY : APPLEVILLE
STATE : CA
ZIP : 99999
MISC : CHRISTMAS CARD

PRESS RETURN FOR NEXT RECORD (1)

(1) Next Record is the next consecutive record when displaying the entire file, or the next record in the Hit File when using the second video option

DISPLAY FILE

4/2/79

L NAME : 1
F NAME : 2
STREET : 3
CITY : 4 (1)
STATE : 5
ZIP : 6
MISC : 7

=====

PLEASE SUPPLY FIELDS TO BE PRINTED
IN THE FOLLOWING FORMAT: N1,N2,N3 WHERE
YOU SUBSTITUTE THE FIELD NUMBERS TO
BE PRINTED FOR N1,N2,N3

IF YOU DO NOT WANT ALL THREE FIELDS
THEN ENTER ZERO FOR FIELD NUMBER

(1) Field Numbers

When the compressed format is requested you may display up to three fields. Each field will be separated by a blank character.

In the following example if you wanted to display the First Name then the Last Name followed by the Street you would respond as follows: 2,1,3

Note: You must always respond with three digits separated by commas. Remember to substitute zero for any unwanted fields. For example if you only wanted the Last Name and Street your response would be: 1,3,0

The following is an example of the Compressed Format

DISPLAY FILE

(1) 1 (2) (3) (4) 4/2/79
 JOHN SMITH 6502 MEMORY LANE
 2 JOHN SMITH 6502 MEMORY LANE
 3 JOHN JONES 6502 APPLESEED LANE
(5) PRESS RETURN TO GOTO MENU

(1) Record Number

(2) First Field Requested In Previous Example

(3) Second Field Requested

(4) Third Field Requested

(5) The above message appears when the file is exhausted.

If the number of records in the file exceed the screen size, the program waits for the user to press the return key. When the return key is pressed the screen is cleared and the next group of records are displayed.

Printer Display Option

DISPLAY HOLIDAY CARD LIST

4/2/79

L NAME : 1
F NAME : 2
STREET : 3
CITY : 4 (1)
STATE : 5
ZIP : 6
MISC : 7

=====

DOES YOUR PRINTER ADVANCE ON LINE FEED
CODE (Y/N) ? (2)
PLEASE ENTER THE LINE WIDTH OF YOUR
PRINTER IN CHARACTERS (40-255) ? (3)
LINES PER RECORD (1-12) ? (4)
LINES BETWEEN RECORDS ? (5)

HOW MANY FIELDS (1-12) ON LINE # 1 ? (6)

FIELD #1 FOR LINE1

FIELD #2 FOR LINE1 (7)

HOW MANY SPACES DO YOU WANT INSERTED
BETWEEN THIS AND THE PREVIOUS FIELD ? (8)

DO YOU WANT TO PRINT DUPLICATE RECORDS
(Y/N) ? (9)

HOW MANY FIELDS TO BE CHECKED (1-7) ? (10)

FIELD #1
FIELD #2

WHICH OPTION DO YOU WANT
A. PRINT WHOLE FILE
B. PRINT HIT FILE
? (11)

Responses on next page.

(1) Field Numbers

(2) This inquiry allows the user to inform the Apple II Parallel Printer Card of the requirements of the particular printer attached to the computer system. A "Y" response will cause the program to issue a command to the printer card turning off the automatic printer line feed. A "N" response will allow the printer card to add a line feed character to the end of each line.

(3) This question allows the user to tell the printer card the line width of the printer connected to the system.

(4) Here the user tells the program how many lines are to be formatted for each record printed, a maximum of twelve lines are allowed.

(5) The user informs the program of the number of lines to skip before printing the next record.

(6) Tells the program how many fields to be printed on a line. A maximum of twelve is allowed, but the line will be truncated if it exceeds the response to question number 3.

(7) & (8) Here you tell which fields are to be printed on this line and how many spaces are to appear between fields.

If you wanted to print First Name followed by Last Name with one space separating the two on the first line you would answer the questions as follows:

a) HOW MANY FIELDS (1-12) ON LINE #1? 2

b) FIELD #1 FOR LINE1 2

c) FIELD #2 FOR LINE1 1

d) HOW MANY SPACES DO YOU WANT INSERTED BETWEEN THIS
AND THE PREVIOUS FIELD? 1

(9) & (10) These questions allow the user to inhibit the printing of records which may contain duplicate data in some fields. If the user responds with "Y" to question 9 then question 10 is not asked. If "N" is given then the program asks how many and which fields are to be checked against the previously printed record for duplicate data.

Important: All fields specified must contain exact duplicate data in order for the printing of the record to be suppressed.

(11) The user may specify all of the records in a file or only those put in the Hit file by a previous Search or Sort operation.

SEARCH FILE

PLEASE CHOOSE ONE OF THE FOLLOWING
SEARCH OPTIONS:

- (1) 1 - DISPLAY ONLY
- (2) 2 - DISPLAY/EDIT
- (3) 3 - DISPLAY/CREATE HIT FILE
- (4) 4 - DISPLAY/EDIT/CREATE HIT FILE
- (5) 5 - CREATE HIT FILE ONLY

- (1) This option will display, on the video, each record that matches the search criteria.
- (2) As well as displaying, this option allows the user to modify or delete each record that matches the search criteria.
- (3) This option displays each match and places the record number of the match into the Hit file.
- (4) This option combines the three previous options.
- (5) This option speeds-up searching by eliminating the video display of matched records. The record number of each match is stored in the Hit file.

SEARCH HOLIDAY CARD LIST

4/2/79

L NAME : 1
F NAME : 2
STREET : 3
CITY : 4 (1)
STATE : 5
ZIP : 6
MISC : 7

=====

PLEASE SUPPLY FIELD NUMBER FOR SEARCH 1 (2)

SEARCH ARGUMENT PLEASE J (3)

- (1) Field Numbers
- (2) Field To Be Searched
- (3) Supply Exact Data To Be Searched For

Note: If the first character of the search argument is a slash "/" then the search routine will consider data that does not match the argument as being a hit.

The following is an example of a HIT.

SEARCH HOLIDAY CARD LIST

3 (1) 4/2/79
F NAME: JONES
L NAME: JOHN
STREET: 6502 APPLESEED LANE
CITY: APPLEVILLE (2)
STATE: CA
ZIP: 999999
MISC: CHRISTMAS CARD

=====

PLEASE SUPPLY FIELD NUMBER FOR SEARCH 1 (3)

SEARCH ARGUMENT PLEASE J (4)

PRESS RETURN FOR NEXT HIT (5)

1 RECORDS FOUND
THAT IS ALL THERE IS (6)
PRESS RETURN FOR MENU

(1) Record Number Of Hit

(2) Data In Record #3

(3) Field To Be Search

(4) Search Argument

(5) When this message appears there are more records
to be searched for.

(6) After the last record in the file has been examined
this message will be displayed.

SORT FILE

PLEASE CHOOSE ONE OF THE FOLLOWING SORT
OPTIONS:

- 1 - PASS ENTIRE FILE
- 2 - PASS ONLY RECORDS IN HIT FILE

The sort routine can process the whole file or a pre-determined portion created by the Hit file.

The sort routine does not physically change the order of the records in the file. Instead it builds a thirty-four byte key record in memory. This key field is then sorted. After the sort is finished the record number portion of the key is written to the Hit file and the rest of the key is discarded.

The following examples illustrate the responses needed by the program to build the sort key desired by the user.

The user can request up to thirty characters of data spread over three fields for the sort key. If more than thirty characters are specified then the program displays an error message and requests the user to redefine the sort key.

```

SORT      HOLIDAY CARD LIST
-----
FIELD    CHARS4/2/79
L NAME:  1          1          15
F NAME:  2
STREET:  3
CITY:    4 (1)      (2)      (3)
STATE:   5
ZIP:     6          2          5
MISC:    7

```

```

=====
PLEASE SUPPLY FIELD NUMBER FOR SORT
FIELD #1 (2)
1
SUPPLY NUMBER OF CHARACTERS IN FIELD TO
BE SORTED 15 (3)

```

```

PLEASE SUPPLY FIELD NUMBER FOR SORT
FIELD #2 (2)
6
SUPPLY NUMBER OF CHARACTERS IN FIELD TO
BE SORTED 5 (3)

```

```

PLEASE SUPPLY FIELD NUMBER FOR SORT
FIELD #3 (4)
0

```

```

PASSING FILE BUILDING SORT KEY
SMITH      99999      1
SMITH(5)   99999(6)  2(7)
JONES     99999      3

```

SORT IN PROGRESS (8)

(1) Field Numbers

(2) Fields Chosen For Sort Key

Each time the user responds with a field number the significance of the field (with 1 being most significant and 3 least) is displayed in the upper portion of the display area.

(3) Here the user supplies the number of characters of each field that is to be used in the sort key. This is also displayed in the upper display area.

(4) If the user wants to use less than three fields in the sort key then a response of zero will cause the program to proceed to the sort key building routine.

(5) First Field Of Sort Key

(6) Second Field Of Sort Key

Because in the example we responded with a zero for field three there is no third field.

(7) The fourth field in the sort key is always the record number.

(8) When this message appears the sort is now sorting.

The following will be displayed at the completion of the sort.

SORT HOLIDAY CARD LIST

**** SORT COMPLETED ****

WHICH DO YOU WANT NEXT?

- 1 - DISPLAY FILE (1)
- 2 - RETURN TO MAIN MENU (2)

(1) Instead of returning to the Menu this response will cause the program to go to the Display option.

(2) Program will return to Menu.

d) LOADING INSTRUCTIONS

Applesoft II (If not in ROM)

1. Press "RESET" key. (asterisk and cursor appear)
 2. Hold the "CTRL" key down and press the "B" key. Then press "RETURN".
 3. Type: "LOAD" and press "RETURN" and start tape recorder.
 4. When the cursor reappears type "RUN" and press "RETURN".
- Address File Generator (SAVEing to Disk first time)*
5. Type: "LOAD" and press "RETURN" and start tape recorder.
 6. When the cursor reappears type "SAVE ADDRESS FILE GENERATOR" and press "RETURN".

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