ATSPELLER

HOME MANAGEMENT

Check your documents for correct spelling







Printed in U.S.A.

ATSPELLER

by

R. Stanley Kistler

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Overview

Atspeller takes any diskette text file produced by such word processors as TYPIT, The ATARI Word Processor, ATARIWRITER, or any other word processor that creates ATARI DOS-compatible files, and checks it against a dictionary file of 30,750 words. It doesn't make up words by adding suffixes or prefixes to root words, but searches for an exact match with the words in the dictionary.

You can create your own dictionary file with words that aren't in the *Atspeller* dictionary — for example, foreign expressions, brand names, scientific terms, or any specialized vocabulary. After you've corrected a text file, you can add the words you corrected to your personal dictionary.

Atspeller highlights the questionable words on the TV screen, or prints them on paper if you prefer. You can choose to edit as you go along, replacing the incorrect word or pressing a key to leave it as it is. You can choose to have Atspeller just report the misspelled words on the TV screen or printer, or it will allow you to correct the misspelled words as they're found. You can also easily review the list of files on your diskette while in Atspeller.

Of course, *Atspeller* won't correct your grammar or tell you if you're using the word incorrectly in its context. But it takes the drudgery out of proofreading, and gives you confidence that your documents aren't marred by spelling and typing errors.

Required accessories

- 48K RAM
- Any text editor using ATARI DOS
- Diskette(s) containing text files
- One or two ATARI 810 Disk Drives

Optional accessories

• ATARI 80-Column Printer or equivalent printer

Contacting the author

Users wishing to contact the author may write to him at:

1150 Norumbega Dr. Monrovia, CA 91016

Important notice

It's a good idea to make a backup copy of the diskette labeled DICTIONARY before you begin to work with the *Atspeller* program.

To duplicate the diskette, call the Disk Operating System (DOS) menu and select option J, Duplicate Disk. Insert the source diskette (*Atspeller* DICTION-ARY) and the destination diskette in two separate drives and let the duplication process go on automatically. (*Note*. This option copies sector by sector. Therefore, when the duplication is complete, any files previously stored on the destination diskette will have been destroyed.)

Sample session

To see just how easy *Atspeller* is to use, go through the following sample session. Each step is explained in detail later in this manual, but this sample session will introduce *Atspeller*. The sample session is for a one disk drive system.

- 1. Remove any program cartridge from the cartridge slot of your computer.
- 2. Have your computer turned OFF.
- 3. Note that the *Atspeller* program contains two diskettes, one labeled *Atspeller* PROGRAM and the other labeled *Atspeller* DICTIONARY.
- 4. Turn on your disk drive.
- 5. When the BUSY light goes out, open the door of disk drive one and insert the PROGRAM diskette with the label in the lower right-hand corner nearest to you. Close the door.
- 6. Turn on your computer and your TV set. The program will load into computer memory and start automatically.

 When the Atspeller PROGRAM diskette has loaded into computer memory, the following screen appears:

> Atspeller COPYRIGHT 1982 R. STANLEY KISTLER

DO YOU HAVE A PERSONAL DICTIONARY FILE (Y OR N)?

Figure 1 First display screen

8. Type N. The following prompt appears:

INSERT DICTIONARY DISK IN DISK DRIVE, THEN PRESS RETURN

Open the disk drive door and remove the PROGRAM diskette. Insert the DIC-TIONARY diskette with the label in the lower right-hand corner nearest to you. Close the door. Then press the RETURN key.

9. The program gives you seven choices, as follows:

PRESS DESIRED SPELLING CHOICE

- 1 = OUTPUT TO TV (MONITOR)
- 2 = OUTPUT TO PRINTER
- 3 = CORRECTION (WITH OUTPUT FILE)
- 4 = DISK DIRECTORY/DELETE/RENAME
- 5 = SEARCH DICTIONARY
- 6 = RETURN TO ATARI DOS
- 7 = SORT PERSONAL DICTIONARY

Figure 2 Spelling choices

Type 1. The program asks for confirmation as follows:

ARE YOU SURE? (Y OR N)

10. Type Y to see this message:

INSERT DOCUMENT DISK IN DISK DRIVE, THEN PRESS RETURN

Insert the diskette with the text file in the disk drive with the label in the lower right-hand corner nearest to you. Close the door. Press the RETURN key to see this prompt:

ENTER DOCUMENT TO BE CHECKED. FILE: D1: ___

Type the file name and press the RETURN key for this prompt:

INSERT DICTIONARY DISK IN DISK DRIVE, THEN PRESS RETURN

- 11. The text appears on the screen with the questionable words highlighted in blue letters on a white background.
- 12. When it's finished, the program displays this message:

ALL TEXT IN THE DOCUMENT CHECKED WORD COUNT = (number) PRESS RETURN TO CONTINUE

Remove the diskette and turn off the computer.

Getting started

Loading Atspeller into computer memory

- 1. Remove any program cartridge from the cartridge slot of your computer.
- 2. Have your computer turned OFF.
- 3. Turn on your disk drive (both drives if you're using two).
- 4. Note that the program contains two diskettes, one labeled *Atspeller* PROGRAM and one labeled *Atspeller* DICTIONARY.
- 5. When the BUSY light goes out, open the disk drive door and insert the PROGRAM diskette with the label in the lower right-hand corner nearest to you. Close the door. (Use disk drive one if you have more than one drive.)
- 6. Turn on your computer and your TV set. The program will load into computer memory and start automatically.

The first display screen

The first display screen, Figure 1 from the sample session, appears.

4 Getting started

Number of disk drives

You can use *Atspeller* with one or two disk drives. The program automatically determines whether you have one or two disk drives, and it gives you instructions for the number you have. In this manual, when the instructions differ, they're indented and underlined. Just refer to the ones you need.

Dictionary files

The *Atspeller* program has a DICTIONARY diskette with over 30,000 words. You may find that this is enough to meet your needs. However, if you find the program bringing up the same words again and again, you may want to create your own personal dictionary file. The section of this manual titled "Creating a personal dictionary file" contains the directions you'll need. In addition, *Atspeller* helps you create a personal dictionary file by automatically storing the words it didn't know if you've selected a correction run.

On the title screen (Figure 1), the program asks if you have a personal dictionary. If you don't want to use one, type N.

One disk drive. The following prompt appears:

INSERT DICTIONARY DISK IN DISK DRIVE, THEN PRESS RETURN

Two disk drives. The following prompt appears:

INSERT DICTIONARY DISK IN DRIVE 1, THEN PRESS RETURN

Press the RETURN key to see this prompt:

INSERT DOCUMENT DISK IN DRIVE 2, THEN PRESS RETURN

Press the RETURN key to see the spelling choices (Figure 2).

However, if you are going to use a personal dictionary file, type Y.

One disk drive. The following prompt appears:

SPECIFY THE FILE THAT CONTAINS YOUR PERSONAL DICTIONARY

IF YOUR DICTIONARY FILE IS NAMED WORDFILE.LOC, JUST PRESS RETURN. FILE: D1:____ Type the file name (unless it's WORDFILE.LOC). Press the RETURN key to see the following prompt:

INSERT PERSONAL DICTIONARY IN DRIVE 1 THEN PRESS RETURN

Two disk drives. When you type Y, the following prompt appears:

SPECIFY THE FILE THAT CONTAINS YOUR PERSONAL DICTIONARY

IF YOUR DICTIONARY FILE IS NAMED WORDFILE.LOC, JUST PRESS RETURN

FILE: D2:___

Type the file name (unless it's WORDFILE.LOC). Press the RETURN key to see the following prompt:

INSERT PERSONAL DICTIONARY IN DRIVE 2 THEN PRESS RETURN

Press the RETURN key. All the words in your personal dictionary file scroll down the screen for you to review while the personal dictionary is loading. The instructions to "PRESS RETURN TO CONTINUE" appear when it's finished loading.

One disk drive. Press the RETURN key to see this prompt:

INSERT DICTIONARY DISK IN DISK DRIVE THEN PRESS RETURN

Two disk drives. When you press the RETURN key, this message appears:

INSERT DICTIONARY DISK IN DRIVE 1, THEN PRESS RETURN

Remove the PROGRAM diskette and insert the DICTIONARY diskette in disk drive one. Press the RETURN key to see the following instructions:

INSERT DOCUMENT DISK IN DRIVE 2, THEN PRESS RETURN

Remove your personal dictionary file, and insert the diskette containing the document you're checking. Press the RETURN key.

Next, the screen displays the spelling correction choices (Figure 2).

Spelling correction choices

When you've followed the instructions to load the dictionary files into computer memory, next decide how you want the program to show your spelling corrections. When the spelling choices (Figure 2) appear, type the number of your choice. (It's not necessary to press the RETURN key.) The program requests that you confirm the choice as follows:

ARE YOU SURE? (Y OR N)

If you type N, the program prompts you to PRESS RETURN TO CONTINUE. Press the RETURN key to see the spelling choices (Figure 2) again.

1 OUTPUT TO TV (MONITOR)

This option prints your text file on the TV screen. The program highlights the words it can't find in the DICTIONARY diskette file (and the personal dictionary file, if you chose to use one).

To select this option, type 1. Confirm your choice by typing Y. The following instructions appear:

One disk drive.

INSERT DOCUMENT DISK IN DISK DRIVE, THEN PRESS RETURN

Insert the diskette containing the document you're going to check. Close the disk drive door and press the RETURN key to see this message:

ENTER DOCUMENT TO BE CHECKED FILE: D1:____

Type the file name and press the RETURN key. Next, this prompt appears:

INSERT DICTIONARY DISK IN DISK DRIVE, THEN PRESS RETURN.

Remove the diskette containing the document you're checking, and insert the DICTIONARY diskette. Close the door and press the RETURN key.

Two disk drives.

ENTER DOCUMENT TO BE CHECKED. FILE: D2:____

Type the name of your document file and press the RETURN key.

When you press the RETURN key, the program immediately begins checking your text.

The text prints on the screen. Each time the program comes to a word that's not stored in the dictionary file, it highlights that word in inverse letters.

One disk drive. If you're checking a long document file, the process of printing on the screen stops from time to time. *Atspeller* prompts you to insert the document disk, and then the DICTIONARY disk. When you follow these instructions, the printing resumes.

When the program has checked the whole file, it prints the following message:

ALL TEXT IN THE DOCUMENT CHECKED WORD COUNT = (number) PRESS RETURN TO CONTINUE

If you press the RETURN key, the spelling correction choices (Figure 2) reappear.

2 OUTPUT TO PRINTER

This option prints the text on paper, with the questionable words underlined by a row of asterisks. You can print your whole document or only those lines with errors.

Figure 4 shows a printout of a complete document, including lines with and without errors.

How can you look a word up in the dictionery if you can't spell it?

At last there's an anser to the perplexing problem of English

spelling. This program looks it up for you and gently points out all those mistakes you've been making for years.

enough, you can create your own dictionary file with even more words (specialized vocabulary, brand names, legal terms, or foriegn expressions, for example).

Figure 3 Sample complete printout

The following shows a printout of the lines containing errors from the same writing sample:

Figure 4 Sample errors only printout

Type 2 to select this option, and confirm your choice. Decide whether you want the whole document (Figure 3) or only the lines containing errors (Figure 4), by answering this question:

FULL PRINTOUT (F) OR ERRORS ONLY (E)?

Type an F or an E, and confirm your choice by typing Y. Then specify the kind of printer you're using, in response to the following screen display:

PRESS PRINTER TYPE 1 = ATARI (80 COLUMN MODE) 2 = ATARI (132 COLUMN MODE) 3 = EPSON (80 COLUMN MODE) 4 = EPSON (132 COLUMN MODE) 5 = OTHER (80 COLUMN) 6 = OTHER (132 COLUMN)

Figure 5 Printer type selection

Check that your printer and your interface module are turned on. Make sure your printer is in the ONLINE mode. Type the number of the printer you're using. When the program asks, "ARE YOU SURE?", type Y.

One disk drive. You see the following message:

INSERT DOCUMENT DISK IN DISK DRIVE PRESS RETURN

Insert the diskette containing the document you're checking in the disk drive. Close the door and press the RETURN key to see the following prompt:

> ENTER DOCUMENT TO BE CHECKED. FILE: D1:____

Type the name of your file and press the RETURN key. You see this message:

INSERT DICTIONARY DISK IN DISK DRIVE THEN PRESS RETURN

Remove the diskette containing the document and insert the DICTIONARY diskette. Press the RETURN key.

Two disk drives. The following message appears:

ENTER DOCUMENT TO BE CHECKED FILE: D2:____

Type the name of the file you're checking and press the RETURN key.

The program begins to print the file automatically. When it's finished, it displays a message that all the text in the document has been checked. Press the RETURN key to see the spelling choices.

3 CORRECTION (WITH OUTPUT FILE)

This option lets you correct one of your text files. The program checks your text file (the way it does in option 1), but pauses each time it comes to a questionable word. You can leave it as it is, or correct it. If you don't know the correct spelling, you can search the DICTIONARY file for the correct spelling. When you're finished, you have a new corrected text file. Then you can add the words you changed to your personal dictionary file (creating one if you don't have one yet).

Type 3 and confirm your choice.

One disk drive. The following prompt appears:

INSERT DOCUMENT DISK IN DISK DRIVE, THEN PRESS RETURN

Insert the diskette containing the document you're correcting in the disk drive. Close the door and press the RETURN key. The program requests the name of the file as follows:

ENTER DOCUMENT TO BE CHECKED FILE: D1:____

Type the name of your file and press the RETURN key.

Two disk drives. The following prompt appears:

ENTER DOCUMENT TO BE CHECKED FILE: D2: ____

Type the name of the file you're checking and press the RETURN key.

When you've corrected the file, you'll have two separate files, each with its own name. One is the file you're checking (the one you just typed). One is a completely new file. You have to give the new file its own name.

One disk drive. This prompt appears on the screen:

ENTER FILE NAME FOR CORRECTED DOCUMENT (MUST BE A UNIQUE FILE)

(JUST PRESS RETURN TO CANCEL CHECKING)

FILE:D1____

Type the new name you're using for your corrected file and press the RETURN key. The following prompt appears:

INSERT DICTIONARY DISK IN DISK DRIVE, THEN PRESS RETURN

Remove the diskette containing the document you're checking and insert the DICTIONARY diskette. Press the RETURN key.

Two disk drives. The following prompt appears on the screen:

ENTER FILE NAME FOR CORRECTED DOCUMENT (MUST BE A UNIQUE FILE)

JUST PRESS RETURN TO CANCEL CHECKING

FILE: D2:____

Type the new name you're using for the corrected file and press the RETURN key.

If you've changed your mind, and want to stop the checking before it has started, just press the RETURN key when the program requests the file name for the corrected document. The program then returns to the spelling choices (Figure 2).

When you press the RETURN key, the check begins. The program displays the text on the screen, pausing whenever a questionable word comes up. The display on the screen looks like this:

At last there's an anser

PRESS C RETURN TO CORRECT THIS WORD D RETURN TO SEARCH DICTIONARY RETURN TO KEEP THIS SPELLING

ENTER CHOICE:

Type C and press the RETURN key to correct the highlighted word. You see this prompt:

ENTER CORRECTED WORD OR JUST RETURN SPELLING:____

If you decide not to change the word, just press the RETURN key. To change the word, type the correct spelling and press the RETURN key. The program prints your word in capital letters unless you press the CAPS LOWR key first. When you finish, confirm your spelling by answering this prompt:

ARE YOU SURE? (Y OR N)

If you're not sure of the correct spelling, you can search *Atspeller*'s dictionary. Type D and press the RETURN key. This prompt appears:

SPECIFY WORD TO SEARCH FOR (TWO OR MORE LETTERS PLEASE).

SEARCH FOR: _____

Suppose you aren't sure how to spell "answer" but you know it must begin with the letters "ans". Type ANS (or ans or Ans) and press the RETURN key. *Atspeller* prints all the words in its dictionary that begin with those three letters (answer, answered, answering, answerable, and answers). If there are too many words beginning with the letters you typed, the program displays some of them with these instructions at the bottom of the screen:

RETURN CONTINUE SEARCH, C TO CANCEL

If you've found the word you need, press C. If not, press the RETURN key and more words appear. Look over the list and press the RETURN key. When you've finished searching through the dictionary, just press the RETURN key when the program requests the words to search for. The instructions to enter the corrected word reappear, while the words from the dictionary remain on the screen at the same time. You can just copy the correct spelling, and press the RETURN key. Again, the program asks "ARE YOU SURE?" The program notifies you when it has reached the end of the text.

One disk drive. You have to change diskettes. The program prompts you as follows:

INSERT DOCUMENT DISK IN DISK DRIVE, THEN PRESS RETURN

Remove the DICTIONARY diskette and insert the diskette with the text you're checking. Close the disk drive door and press the RETURN key. The program soon notifies you that it has checked all the text. Press the RETURN key.

Now that you've corrected the words highlighted in the text file, *Atspeller* gives you a chance to save the words that you didn't correct in your personal dictionary. The following prompt appears:

SAVE NEW WORDS IN PERSONAL DICTIONARY FILE (Y OR N)?

IF YOU DO NOT ALREADY HAVE A PERSONAL DICTIONARY FILE, YOU MAY CREATE ONE IF YOU PRESS Y

You can either add these words to a personal dictionary file you've already created, or create a new personal dictionary file with these words. Type Y to begin.

One disk drive. The following prompt appears:

SPECIFY THE FILE THAT CONTAINS YOUR PERSONAL DICTIONARY

IF YOUR DICTIONARY FILE IS NAMED WORDFILE.LOC, JUST PRESS RETURN.

D1:___

Type the name and press the RETURN key. If you already have a file, and you've named it "WORDFILE.LOC" just press the RETURN key.

If you're creating a personal dictionary, just press the RETURN key. The program will open a dictionary file named WORDFILE.LOC on your diskette. This is the most convenient name to use. Next the program helps you prepare a diskette for your personal dictionary:

INSERT PERSONAL DICTIONARY IN DRIVE 1 THEN PRESS RETURN

Insert either a blank DOS-II formatted diskette or the personal dictionary diskette you've already begun. Close the door and press the RETURN key.

Two disk drives. The following prompt appears:

SPECIFY THE FILE THAT CONTAINS YOUR PERSONAL DICTIONARY

IF YOUR DICTIONARY FILE IS NAMED WORDFILE.LOC, JUST PRESS RETURN

FILE:D2:____

Type the name you're using for your personal dictionary file. If it's WORDFILE-.LOC, just press the RETURN key. If you're creating a personal dictionary, just press the RETURN key, and the program opens a file named WORDFILE-.LOC on your diskette. This is the most convenient name to use. Next the program helps you prepare the diskette for your personal dictionary file.

INSERT PERSONAL DICTIONARY IN DRIVE 2 THEN PRESS RETURN

Insert either a blank DOS-II formatted diskette, or the diskette you've been using for a personal dictionary file, in disk drive two. Close the door and press the RETURN key.

Next you can have the program store automatically all the words you typed, or you can select which ones you want stored. The following prompt appears:

SELECT WHICH WORDS TO STORE (Y OR N)?

If you type N, the program displays the words it's adding to your personal dictionary file as it stores them automatically.

If you type Y, each word appears at the left of the screen, and the words "STORE (Y OR N)" appear at the right. Answer yes or no for each word.

The program doesn't add words that are already stored on the DICTIONARY diskette. When it's finished, the program displays this message:

ALL WORDS WRITTEN TO DICTIONARY PRESS RETURN TO CONTINUE

When you press the RETURN key, the program prompts you to insert your document diskette in the appropriate disk drive and press the RETURN key. When you do, you see the spelling choices (Figure 2).

4 DISK DIRECTORY/DELETE/ RENAME FILES

After you've corrected a text file, this option allows you to determine what files are on the text file diskette, to delete the old, uncorrected text file, and to rename the new, corrected text file. Type 4 to select this option.

One disk drive. If the diskette containing your text file is NOT in the drive, the program prompts you as follows:

INSERT DOCUMENT DISK IN DISK DRIVE THEN PRESS RETURN

Insert the diskette you want to check, close the door, and press the RETURN key.

Two disk drives. Insert the diskette you want to check in disk drive two, close the door, and press the RETURN key.

These options appear on the screen:

PRESS DESIRED DISK FILE OPTION

1 = LIST DISK DIRECTORY 2 = RENAME A FILE 3 = DELETE A FILE 4 = RETURN TO SPELLING PROGRAM

Figure 6 Diskette file options

To see what files are stored on a diskette, type 1. The program prints a list of all the file names. At the end are instructions to press the RETURN key. Then the diskette file options (Figure 6) reappear.

To rename a file, type 2. The following instructions appear on the screen:

ENTER RENAME COMMAND. (FOR EXAMPLE, OLDNAME.TXT, NEWNAME.NEW)

At the bottom of the screen, you see the word "RENAME" followed by the number of the disk drive and a blank. Type the current name of the file, a comma, and the new name you want to give the file. The program requests confirmation as follows:

ARE YOU SURE? (Y OR N)

After you type Y, the program changes the name of the file. You can check by asking for a directory. The diskette file options (Figure 6) reappear on the screen.

To delete a file, type 3. You see the following instructions:

One disk drive.

SPECIFY WHICH FILE TO DELETE (FOR EXAMPLE: D1:BADFILE.LIS)

FILE: D1:___

Two disk drives.

SPECIFY WHICH FILE TO DELETE (FOR EXAMPLE: D2:BADFILE.LIS)

FILE: D2:____

Type the name of the file you want to delete. The program asks for confirmation as follows:

ARE YOU SURE? (Y OR N)

When you type Y, *Atspeller* immediately deletes the file. You can check by looking at the directory of the diskette. The diskette file options (Figure 6) reappear on the screen.

To return to the menu of spelling correction choices (Figure 2), type 4.

5 SEARCH DICTIONARY

If you're looking for the spelling of a particular word, *Atspeller* can look through its dictionary for you. You just give the program a hint — the first few letters — and it displays all the words that start with those letters.

Type 5 and confirm your choice. The following prompt appears:

SPECIFY WORD TO SEARCH FOR (TWO OR MORE LETTERS PLEASE).

SEARCH FOR:

Suppose you're looking for the word "computer". Type COM and press the RETURN key. The program prompts you to insert the DICTIONARY diskette in disk drive one and press the RETURN key. A list of all the words in the *Atspeller* dictionary beginning with "com" scrolls down the screen.

You can pause the scrolling by holding down the CONTROL key and typing 1. To resume the scrolling, again hold down the CONTROL key and type 1. Also, you can try typing a few more letters, to narrow down the selection of words that the program displays on the screen. For example, type COMPU instead of just COM. Fewer words appear on the screen.

At the end of the list is this message:

PRESS RETURN TO CONTINUE

When you press the RETURN key, the program starts over, asking you to specify another word to search for. When you've finished, reply to that prompt by pressing the RETURN key. You see the spelling choices (Figure 2).

6 RETURN TO ATARI DOS

This option allows you to return to the ATARI DOS menu. Type 6 and confirm your choice. The following prompt requests another confirmation:

ARE YOU SURE YOU WANT TO RELOAD ATARI DOS? (Y OR N)

Type Y to continue. The following prompt appears:

PUT ANY DISKETTE WITH ATARI DOS IN DISK DRIVE 1, THEN PRESS RETURN

Follow these instructions to remove the diskette in the disk drive and replace it with another diskette that has DOS on it. Press the RETURN key, and the ATARI DOS menu appears on the screen.

7 SORT PERSONAL DICTIONARY FILE

This option allows you to sort your personal dictionary, a file for words that don't appear in *Atspeller*'s own dictionary, into alphabetical order. This personal dictionary file might include some names, legal terms, foreign expressions, trademarks, or scientific vocabulary. You might want to have several different personal dictionaries for different purposes — one in German and one in French, for example.

When the *Atspeller* program first loads into computer memory, the title screen (Figure 1) asks if you're using a local dictionary file. To create one adding your own words to *Atspeller*, follow these steps.

Use a blank DOS-II formatted diskette. Just type a list of words, one to each line, in any order, using a word processor (such as TYPIT, AtariWriter, or ATARI Word Processor), or an editor (such as ATARI Program Text Editor). Give the file a name; if you call one of the files WORDFILE.LOC, you can load it into computer memory by just pressing the RETURN key.

You may type in upper case, lower case, inverse video (blue type on a white background) or any combination of the three methods. The program converts the words to normal video, lower case, when they're loaded for use or sorting.

The words in the personal dictionary don't have to be in alphabetical order. This option of the program alphabetizes them for you so that you can easily edit them or add new words to your dictionary file.

Press 7 to select this option. The program asks for confirmation of your choice as follows:

ARE YOU SURE YOU WANT TO SORT YOUR PERSONAL DICTIONARY NOW? (Y OR N)

Type Y to continue. Then the program instructs you as follows:

INSERT THE Atspeller PROGRAM DISK IN DISK DRIVE 1, THEN PRESS RETURN

You have a short wait before program displays the choices under this option (see Figure 7).

PRESS DESIRED OPTION

- 1 = SORT PERSONAL DICTIONARY FILE
- 2 = RETURN TO ATARI DOS
- 3 = RETURN TO SPELLING PROGRAM

Figure 7 Dictionary sort options

To sort the dictionary, type 1. The program requests that you confirm your choice.

One disk drive. The following prompt appears:

SPECIFY THE NAME OF YOUR PERSONAL DICTIONARY FILE (FOR EXAMPLE, MYDICT.LOC)

IF YOUR PERSONAL DICTIONARY FILE IS NAMED WORDFILE.LOC, JUST PRESS RETURN

FILE: D1:____

Type the name you assigned to the file, unless it's WORDFILE.LOC. Press the RETURN key. Then the program asks you to do the following:

INSERT PERSONAL DICTIONARY DISK IN DRIVE 1, THEN PRESS RETURN

Remove the *Atspeller* program diskette from the disk drive and insert the diskette containing your personal dictionary file. Close the door and press the RE-TURN key.

Two disk drives. The following prompt appears:

SPECIFY THE NAME OF YOUR PERSONAL DICTIONARY FILE (FOR EXAMPLE, MYDICT.LOC)

IF YOUR PERSONAL DICTIONARY FILE IS NAMED WORDFILE.LOC, JUST PRESS RETURN

FILE:D2:

Type the name you've given to your personal dictionary file (unless it's WORD-FILE.LOC). Press the RETURN key. The program prompts you as follows:

INSERT PERSONAL DICTIONARY DISK IN DRIVE 2, THEN PRESS RETURN

Insert the diskette containing your local dictionary file and press the RETURN key.

The words in your local dictionary file are listed on the screen. If you have any words containing letters in CTRL (CONTROL) codes, the ATSORT program rejects those words. This might happen if your word processor uses these codes to set up a text file. This message appears at the bottom of the screen when *Atspeller* has gone through the entire list:

ALL WORDS READ FROM DICTIONARY FILE WORD COUNT = [number] PRESS RETURN TO CONTINUE

After *Atspeller* has alphabetized the words, you must decide whether you want the words to stay in the same dictionary file (with the name you typed above) or a new file (with a completely new name). When you press the RE-TURN key, the following prompt appears:

DO YOU WANT TO STORE THE SORTED WORDS IN THE SAME DICTIONARY FILE? (Y OR N)

If you respond by typing Y, confirm your choice, and the program begins to store the words in the same file you typed above. While *Atspeller* is at work, the words "REWRITING DICTIONARY FILE" appear on the screen.

If you type N, and confirm your choice, the program instructs you to enter a new file name, as follows:

SPECIFY THE FILE TO STORE THE SORTED DICTIONARY WORDS IN. THE FILE MUST NOT ALREADY EXIST ON THE DISK.

The word "FILE" and the disk drive number appear at the bottom of the screen. Type the new name you're going to use for the personal dictioary file. Press the RETURN key.

The words in the file scroll down the screen. This time they're in alphabetical order. When *Atspeller* has finished, this message appears at the bottom of the screen:

ALL WORDS OUTPUT TO DICTIONARY FILE PRESS RETURN TO CONTINUE

Now your personal dictionary is alphabetized. When you press the RETURN key, you see the dictionary sort options (Figure 7) again.

Type 2 to see the ATARI DOS menu. Confirm your choice, and the following instructions appear:

PUT ANY DISKETTE WITH ATARI DOS IN DISK DRIVE 1, THEN PRESS RETURN

Follow these instructions and press the RETURN key. (Your personal dictionary diskette might already have DOS on it, so you'd only have to press the RETURN key.) The DOS menu appears on the screen.

Type 3, and confirm your choice, to return to the spelling choices (Figure 2). The program requests that you change diskettes, as follows:

INSERT THE Atspeller PROGRAM DISK IN DISK DRIVE 1, THEN PRESS RETURN.

You return to the beginning of the program.

Note. It's a good idea to make a backup copy of the personal dictionary. Follow the same procedure as in duplicating the DICTIONARY diskette (in the "Important notice" section of this manual).

The SYSTEM RESET key

If you press the SYSTEM RESET key while you're using *Atspeller*, whatever the program is currently doing is immediately canceled, and the program starts over from the beginning. There are two important reasons you might consider pressing the SYSTEM RESET key:

If you're using two disk drives, and you forget to turn on your second disk drive when you start running *Atspeller*, the program won't know that you're using two disk drives. It requests that you put all diskettes into disk drive 1. If you press the SYSTEM RESET key, the program automatically checks again for the second disk drive. If it finds your second drive turned on, it changes from the one-drive to the two-drive method.

Second, if you decide you really wanted to load a personal dictionary file after you've started running the program, press the SYSTEM RESET key. *Atspeller* asks you again if you have a personal dictionary file. It asks this question ONLY if you didn't load a personal dictionary file when the program first started to run.

The BREAK key

At most times, the BREAK key is disabled, so that pressing it will have no effect. But when the program is checking a file, you can press the BREAK key to stop it.

The following message displays

CHECKING CANCELED BY BREAK KEY WORD COUNT = (number) PRESS RETURN TO CONTINUE

When you press the RETURN key, the program returns to the spelling choices (Figure 2). You can use this feature if you accidentally begin to check the wrong file.

Advanced technical information

The spelling data base

The words in the data base came from the spelling program that's part of the RATFOR shell available from DECUS as a part of the VAX SIG (special interest group). Since there were over 43,000 words in this data base, the dictionary file was edited to produce a subset of words that would fit on the ATARI diskette. This list was then supplemented by the 10,000 most commonly used words based on the American Heritage Dictionary Word Frequency Book. The author gave special attention to choosing the words most commonly used in general text applications. However, some compromises were necessary, so you can compensate for words you need with the local dictionary file.

Spelling conventions

Before looking up the word in the dictionary files, the program checks for one of the special cases listed below. If the word fits into one of these, it's considered correct. This avoids nuisance errors that would cause many words to be flagged as incorrect. The conventions are as follows:

Any single letter word is considered correct.

Any word containing a number (for example, abc2) is considered a "buzz word". It won't be flagged.

If a word ends in the possessive case (with 's), the ending is removed before the word is checked. For this reason, it's not necessary to add possessive words to your local dictionary file. (For example, if you add "Carl" to the local dictionary file, the program won't flag the word "Carl's".)

If no words have been marked as misspelled, you can't assume the text file has no errors. The *Atspeller* program can't check for grammar, and it can't tell if the word is used correctly in its context.

Theory of program operation

The program starts reading from the input file assigned by the user. Then it identifies the position of the words in the line, and copies the words, one at a time, into a special buffer for checking. It then converts the words from their input form to normal video, lower case, for checking.

If the user has read in a personal dictionary file, the personal dictionary contained in computer memory is first consulted. If the word is there, the program doesn't look for it on the DICTIONARY disk. The program consults the personal dictionary first, because looking through computer memory for a word is much faster than searching the DICTIONARY diskette.

If a word isn't found in the personal dictionary file, a mini-dictionary (also contained in computer memory) is consulted next. This dictionary contains all the common two-, three-, and four-letter words that are frequently used in text (for example, "the" or "as"). This cuts the time in looking up common words, and increases program execution speed. This dictionary is based on the 500 most commonly used words in the *American Heritage Dictionary Word Frequency Book*.

If the word still isn't found, the program then checks a circular list of words read from the dictionary file that it maintains in RAM. The logic behind this list is based on the fact that most language is pattern-oriented, and, if you use a word once, you'll most likely use it again. For that reason, the program automatically stores each word that it looks up from the dictionary in a special buffer. If you use that word again, it won't have to look it up from the dictionary diskette a second time. You can get an idea of how the process works by checking a document twice in a row for errors. Unless the document is very long, you'll probably find that the dictionary diskette doesn't spin at all the second time. This technique also effectively causes the program to check spelling progressively faster and faster as it checks more and more of your document.

If a word isn't found in the personal dictionary stored in computer memory, or the list of words already read from the dictionary diskette also stored in computer memory, the program searches the dictionary diskette for the word. Several techniques speed up this search, including multiple index files, compressed text (in five-bit form rather than normal eight-bit ASCII, and random access on the dictionary diskette.

The DICTIONARY diskette contains an index file (INDEXB.DAT). A primary index file is contained in computer memory. The primary index file contains pointers for the first two-letter pairs into the secondary index file (INDEXB.DAT).

In operation, *Atspeller* first determines the first two letters in the word, and looks in the primary index table contained in computer memory to see if there are any entries for that letter pair. If there is an entry, the program points to that location in the secondary index file and begins reading entries. When it finds the proper match on the first four letters of the word, it then points to the proper location in the dictionary file and begins reading words. It continues until it finds the proper word, or until it has read past where the word should have been in the proper alphabetic order.

Program execution speed

With the technique used to read the index files and dictionary, the maximum number of sector reads required to find a word is fifteen. The program reads up to five sectors from the secondary index file (INDEXB.DAT), and a maximum of ten sectors from the dictionary file (WORDFILE.DAT). The average number of reads required from the DICTIONARY diskette will be much less. The average word requires one read from the secondary index file and three reads from the dictionary files.

The maximum of fifteen reads would require only about 0.10 seconds at the rate the ATARI serial bus operates. However, the time involved in positioning the heads, for the drive to acknowledge, and actual data transmission to take place is much greater. Based on timing runs on several different documents, including one with over 12,000 words (which occupied 645 sectors on the diskette), a mean time of 0.35 seconds per word has been observed in actual running of the program. The timing runs were made on an older ATARI 810 Disk Drive that hadn't been updated to improve the access time. In a typical letter, which contains 200 to 300 words, a total processing time of one to one and three-fourths minutes should be expected. On longer documents, using the printer allows the computer to run unaided, while the user can do other things.

Using a private dictionary file can increase the execution speed of the program. For example, a document occupying 430 sectors on a diskette and containing 6,400 words, required 15 minutes for checking without a private dictionary file. However, the same document contains only 705 unique words with a total of 6,200 bytes. If all the words are included in a private dictionary file, it takes only six minutes to check the entire document.



Review Form

We're interested in your experiences with APX prog.; ams and documentation, both favorable and unfavorable. Many of our authors are eager to improve their programs if they know what you want. And, of course, we want to know about any bugs that slipped by us, so that the author can fix them. We also want to know whether our instructions are meeting your needs. You are our best source for suggesting improvements! Please help us by taking a moment to fill in this review sheet. Fold the sheet in thirds and seal it so that the address on the bottom of the back becomes the envelope front. Thank you for helping us!

1. Name and APX number of program.

2. If you have problems using the program, please describe them here.

3. What do you especially like about this program?

4. What do you think the program's weaknesses are?

5. How can the catalog description be more accurate or comprehensive?

- 6. On a scale of 1 to 10, 1 being "poor" and 10 being "excellent", please rate the following aspects of this program:
 - Easy to use
 - _____ User-oriented (e.g., menus, prompts, clear language)
 - _____ Enjoyable
 - _____ Self-instructive
 - _____ Use (non-game programs)
 - _____ Imaginative graphics and sound

7. Describe any technical errors you found in the user instr page numbers).	
8. What did you especially like about the user instructions?	
9. What revisions or additions would improve these instructions?	
10. On a scale of 1 to 10, 1 representing "poor" and 10 represer would you rate the user instructions and why?	nting "excellent", how
11. Other comments about the program or user instructions:	
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nm 	STAMP
ATARI Program Exchange P.O. Box 3705 Santa Clara, CA 95055	

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ATSPELLER

by R. Stanley Kistler

- Take the drudgery out of proofreading documents for spelling errors
- Check any ATARIDOS-compatible text file
- Add your own words to the dictionary

How can you look a word up in the dictionary if you can't spell it? At last there's an answer to the perplexing problem of English spelling.

Atspeller takes any diskette text file produced by *Typit*, the ATARI Word Processor, or any other word processor that creates ATARI DOScompatible files, and checks it against a dictionary file of more than 30,000 words. If that's not enough, you can create your own dictionary file with even more words. You can have the questionable words highlighted on your TV screen or printed on paper. You can interrupt the program to search the dictionary for the spelling of a word and you can edit as you go along, replacing the incorrect word or leaving it as it is. Finally, if you have too many errors, Atspeller can write a new file for you. Atspeller takes the drudgery out of proofreading, and gives you confidence that your documents aren't marred by spelling and typing errors.

Requires:

 Diskette(s) containing text files

Diskette

- (APX-20191) ■ ATARI 810[™] Disk Drive
- 32K RAM

Optional:

 ATARI printer or equivalent printer

About the author

R. Stanley Kistler

Stan Kistler claims that he became an engineer because engineers don't have to spell. He's a chemical engineer who does research on heat transfer and pressure drop in industrial heat exchangers. With a responsibility for technical manuals, he faced the problem of spelling at last, and he turned to his computer to help solve it. He had chosen the ATARI Home Computer for its keyboard, its editing

capabilities, its games, and most of all, for the educational benefits it would bring to his sevenyear-old son, Christopher. He originally planned to write some games, but he was intrigued by the challenge of a spelling checker. He worked for a year solving problems (such as getting the dictionary on the diskette) and testing the program. The Kistlers live in Monrovia, California.