TASWORD

EINSTEIN

THE WORD PROCESSOR

A TASMAN SOFTWARE PROGRAM
FOR THE TATUNG EINSTEIN AND EINSTEIN 256

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TASWORD EINSTEIN

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Getting Started with TASWORD

Learning to Use TASWORD

Tasword is designed to be easy to use. We suggest that you learn to use Tasword by the following steps:

(1) Read 'How Tasword Works' on pages 3 to 6 of this manual;

(2) Load Tasword as described on page 7;

(3) Type in a few lines of text paying attention to the features described in the 'How Tasword Works' section of this manual. Experiment with some of the command keys — they are all described on pages 9 to 18;

(4) Load the Tasword Tutor text file following the procedure described on page 8;

(5) Take your time working through Tasword Tutor and experiment as much as you like. Refer to the control key descriptions in the manual (pages 9 to 18) as you work through Tasword Tutor;

(6) You will now be sufficiently familiar with Tasword to use it to produce your own text files. As you continue to use Tasword you will discover which of the facilities are most useful to you and you will find that you remember the relevant control keys. Don't forget that the help pages are always there;

(7) Save Tasword, following the instructions on page 7, and use this disc as your working copy. Keep the original as your back-up copy.

The CONTROL and GRAPH Keys

The [CTRL] and [GRAPH] keys are referred to frequently both in this manual and in the Tasword help pages. The control key is the key marked [CTRL] on the keyboard.

These keys are always used in conjunction with some other key by holding either [CTRL] or [GRAPH] down and pressing the other key while still holding the [CTRL] or [GRAPH] key down. For example:

> [CTRL] J means hold [CTRL] down and press the J key
>
> [GRAPH] I means hold [GRAPH] key down and press the I key

How TASWORD Works

The Text File

Tasword operates on a text file which contains whatever you type in from the keyboard. This text file can be up to about 560 lines long. The maximum length of a line in the text file is 64 characters. The length of a line can be changed by setting margin positions.

The Window

The monitor is a 'window' which shows 22 lines of the text file. Certain 'Control Keys' move the window up or down the text file. Moving the window is called 'scrolling'. The window can be 'changed' to show just 32 of the characters on each line at normal Tatung Einstein character size.

The Cursor

The cursor is a flashing square that indicates your current position in the text file. The cursor can be moved using the arrow keys on the keyboard and by certain other control key actions.

The Keyboard

Each time you press one of the character keys the character corresponding to that key appears on the screen at the cursor position. To type a capital letter hold one of the [SHIFT] keys down and press the required letter key. Some keys are marked with two characters. The lower character on the key is typed when the key is pressed, To type the upper character on the key hold one of the [SHIFT] keys down and press the key.

The grey coloured keys at each side of, and at the top of, the keyboard are 'Tasword Command Keys'.

Auto Repeat

If pressure is kept on any key then after a slight delay the key action is repeated. This applies to both character keys and most command keys.

The Command Keys

A Tasword command key is a key which does not type a letter when pressed but instead manipulates the text file in some way. For example the arrow keys move the cursor. Another useful command key is the Escape key [ESC] which displays one of the two help pages on the screen. The help pages give a brief description of each command key action and the first help page is reproduced below.

THE FIRST TASWORD EINSTEIN HELP PAGE

‹ ‹ ‹ TASWORD EINSTEIN › › ›

CURSOR MOVEMENT			On	Tatung TP80	Off
CTRL <	scroll up				
CTRL >	scroll down		■	superscript	□ F0
CTRL G	word left				
CTRL F	word right		■	enlarged	• F1
CTRL T	start of text				
CTRL V	end of text		■	condensed	• F2
GRAPH <	fast scroll up				
GRAPH >	fast scroll down		■	underline	• F3
CTRL →	tab				
FORMATTING			■	cond.enlarged	• F4
CTRL Q	move text left				
CTRL W	centre line		■	emphasised	•
CTRL E	move text right				
CTRL J	justify paragraph		•	double strike	F6
CTRL K	justify line				
CTRL U	unjustify line		■	subscript	■ F7

TEXT FILE COMMANDS
CTRL ENTER   load / save / merge / print text

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ENTER returns to text   ESC for the other help page

Many of the command key actions are obtained by holding the Control [CTRL] key down and pressing the relevant key.

Some of the command key actions similarly require the [GRAPH] key to be held down while the relevant key is pressed.

A full description of the action of each of the command keys is given on pages 9 to 18.

While a help page is showing press [ENTER] to go back to where you were in the text file.

Tasword Einstein has two help pages. When either of the help pages is showing press [ESC] to view the other help page. The second help page is reproduced on the next page.

THE SECOND TASWORD EINSTEIN HELP PAGE

‹ ‹ ‹ TASWORD EINSTEIN › › ›

DELETE/INSERT			MARGINS	
DEL	delete character		CTRL A	set left margin
GRAPH DEL	delete line		CTRL S	reset margins
SHIFT DEL	forward delete		CTRL D	set right margin
CTRL X	clear text			
CTRL I	insert line/character		CASE CHANGE	
BLOCK COMMANDS			CTRL *	cap. to lower
CTRL B	mark start of block		CTRL +	lower to cap.
CTRL N	mark end of block			
CTRL M	move marked block		TASPRINT OPTION	
CTRL C	copy marked block			
CTRL Z	delete marked block		Lectura	■ F0
SWITCHES			Median	■ F1
CTRL O	change window		Compacta	■ F2
GRAPH I	insert mode on/off		Data run	■ F3
GRAPH J	right justify on/off		Palace	■ F4
GRAPH W	word-wrap on/off		Font on/off	~
GRAPH P	page break on/off		underline on ■ off	■ F5
SEARCH			inverse on ■ off	■ F6
GRAPH F	find or replace test		box on ■ off	■ F7

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ENTER returns to text   ESC for the other help page

Word Wrapping

Unless overridden by the [GRAPH] W command key (see page 13) Tasword word-wraps automatically at the end of each line. This means that if your last word on a line does not fit onto the line then the whole word is transferred to the beginning of the next line. The only time you will normally use the [ENTER] key when typing in text is when you want to start a new paragraph. You will soon find that when you are typing in text you will only occasionally look at the screen — Tasword keeps the text neat and leaves you free to concentrate on the keyboard.

Justification

As well as word-wrapping when a word overflows the end of a line Tasword automatically justifies the line that has just been finished. The words in the line are spaced out by inserting spaces between them so that the text spreads across the screen. This gives the text a neat appearance with no jagged margin on the right hand side.

The automatic justification can be turned off using the [GRAPH] J command key (page 13). This results in the typed text having a 'ragged right' appearance that may be, according to personal preference, more appropriate for the task in hand.

It is straightforward to change text that has already been typed from right justified to ragged-right or vice versa. Simply use the [GRAPH] J command key to turn right justification on or off and then use the [CTRL] J command key (page 12) to rejustify the desired paragraphs.

Tall Cursor

When you type the last character in a line Tasword moves the cursor to the beginning of the next line. The cursor becomes taller. If you type a character when the cursor is tall Tasword will assume that the character is part of the last word on the previous line and word-wrap. If the word on the previous line is finished you must type a space line and word-wrap. If the word on the previous line is finished you must type a space — as you would have done anyway if you had not looked at the screen — before typing the next word.

If the last character on a line is a punctuation mark Tasword will not word-wrap when you begin the next line even if you type a character when the cursor is tall. It will ignore the first two spaces that you type so that you do not indent a line accidentally.

Good Typing Practice

Help Tasword help you by following the two simple rules of good typing practice:

(1) Always type at least one space after the full stop at the end of a sentence or after any other punctuation mark;

(2) Always begin a new paragraph by indenting (typing spaces at the beginning of) the first line or by leaving a blank line between paragraphs, or by doing both.

The Reference Sections

The remainder of this manual is for reference. You do not have to read it all before you can begin to use the program. The most commonly utilised facilities in the program are readily used by referring to the help page and using on-screen prompts at various points.

Four main parts follow. The first is concerned with loading and running the program and saving and loading the text files you create to and from disc. The second part describes all the command key actions, grouped by type. Printing, and the format of printed text files, is described in the third part. The fourth part describes how you can customise the program to suit your own applications and personal preferences. Two appendices cover certain points concerning printers.

Loading and Running TASWORD

To load Tasword position the disc in the disc drive with the A side uppermost. (If the cursor prompt is not "O:" then press [CTRL] [BREAK] to load DOS). Type

TASWORD

and press [ENTER].

Tasword starts running when loaded. You will see the cursor flashing at the beginning of an empty text file and the line number and other information at the bottom of the screen. You can now type in text or load a previously created text file from disc (see page 8).

To load Tasword Tutor follow the instructions on page 8.

Saving Tasword

PLEASE NOTE: The facility to save Tasword has been included to allow you, the purchaser, to make back-up copies and to save your customised versions of Tasword. Passing copies of Tasword to a third party is a breach of copyright.

To make a back-up or customised copy of the Tasword program press the [CTRL] [ENTER] command key while Tasword is running. A list of options will appear on the screen as shown on page 18. Put a blank but formatted disc into the drive and press B to save the Tasword program.

When the save is complete the program will return to the main menu shown on page 18.

Saving and Loading Text Files

Saving

You can save the text you have typed onto disc as a "text file". Press the [CTRL] [ENTER] command key while Tasword is running and the list of options shown on page 18 will appear on the screen. Choose the "Save text file" option by pressing the S key. Tasword will display a list of the files that are already on the disc and will ask you to type in a name for the text file. Type in a name of your choice and press [ENTER].

Text file names may be up to eight characters, followed by an optional full stop and a three character file type. The following examples of text file names are all valid:

```
TUTOR
TUTOR.TXT
DOCUMENT
DOCUMENT.002
DOCUMENT.BAK
```

If you save a text file with a name corresponding to a file that is already on the disc then the name of the file on the disc will be changed so that its file type is BAK. For example, if there is a file on the disc named

DOCUMENT.TXT

and you save your text with the same name, then after your text has been saved the disc will contain the following two files:

DOCUMENT.TXT
DOCUMENT.BAK

where the latter is the old file that has been renamed. (If there was already a file DOCUMENT.BAK then it will have been erased.)

When the save is complete the main menu shown on page 18 will reappear on the screen. Press R if you wish to return to the text file.

Loading

LOADING A TEXT FILE WILL CLEAR ALL THE TEXT THAT IS CURRENTLY IN THE TASWORD TEXT FILE.

To load a text file from disc use the [CTRL] [ENTER] command key to obtain the main menu as shown on page 18. Then press the L key to select the "Load text file" option. Tasword will show you the names of the text files that are already on the disc and then ask you to type the name of the text file that you wish to load. Type a name and press [ENTER].

Merging

Merging is loading a text file from disc and putting it in the Tasword text file *after* any text that is already there. To do this use the [CTRL] [ENTER] control key and then press the M key to select the "Merge text file" option. Tasword will then prompt you to follow the same procedure as described in "loading" above.

TASWORD Einstein Tutor

Tasword Einstein Tutor is a text file which helps you familiarise yourself with the use of the command keys.

The Tutor is recorded on the program disc. Load Tasword as described on page 7. Leave the disc in the drive when the program has loaded. You will see the flashing square, the cursor, near the top of a mainly empty screen. Hold down the control key [CTRL] and press [ENTER]. This is [CTRL] [ENTER]. The list of options shown on page 18 will appear on the screen (this is the main menu). Follow the normal procedure for loading a text file by taking the following steps:

(1) Select the "Load text file" option by pressing the L key;

(2) Tasword will display the names of the files on the disc and ask you for the name of the text file which you wish to load. Type:

TUTOR.TXT and press [ENTER].

Tasword Einstein Tutor will appear on the screen as soon as it has loaded.

The Command Keys

[CTRL] indicates that the Control [CTRL] key must be held down while the relevant key is pressed. [GRAPH] means that the [GRAPH] key must be held down.

Help Commands

Tasword Einstein contains two help pages summarising the text editing commands. These help pages are readily accessed at the touch of a key. They are an invaluable aid. The message at the bottom right hand corner of the screen reminds you that the help pages are accessed via the [ESC] key.

[ESC]   show first help page

The first help page is displayed when the Escape key [ESC] is pressed. When this help page is on the screen press [ENTER] to return to the text file or press [ESC] again to view the second help page.

[ESC]   [ESC]   show second help page

The second help page is displayed when [ESC] is pressed twice or when it is pressed once when the first help page is showing. When the second help page is showing press [ENTER] to return to the text file or press [ESC] again to show the first help page.

[CTRL] L   get help

This command key is normally inhibited but can be enabled through the "Customise program" option described on pages 23-26. When [CTRL] L is enabled and pressed the help pages are copied into the first 48 lines of the text file (overwriting any text that is there). The help pages may then be edited. This feature is particularly useful if you redefine some of the printer control characters as you may use it to edit the part of the help page that describes the function of the printer control characters.

[CTRL] P   put help

This command key is also enabled via the "Customise program" option. It puts the top 48 lines of the text file into the two help pages. [CTRL] P disables [CTRL] L and [CTRL] P to prevent accidental overwriting of text and/or the help page. See page 24 for a further description of the [CTRL] L and [CTRL] P commands.

Cursor Movement

[ENTER]

This key moves the cursor to the left margin at the beginning of the next line. If the insert mode is On (see page 15) a new line is also inserted.

ARROWS   move cursor

The two arrow keys at the right hand part of the keyboard are used to move the cursor to any required position on the screen. Keeping an arrow key depressed causes auto-repeat to be implemented and this is a useful way of moving the cursor quickly towards some desired position on the screen.

The left arrow key may be used to move the cursor to the left of the left margin if the left margin is set to some other position than column one. The right arrow can move the cursor to the right of the right margin if the latter is set to less than column 64.

[CTRL] T   start of text

This command key is used to jump back to the beginning of the text file.

[CTRL] V   end of text

When this key is pressed Tasword finds and displays the end of the text file.

[CTRL] G   word right

This key moves the cursor to the beginning of the next word to the right. If there is no word to the right of the cursor then it moves to the beginning of the next line.

[CTRL] F   word left

Shift left arrow moves the cursor to the end of the next word to the left of the cursor.

There is an aid to remembering the position and function of the above four command keys: the keys are grouped next to each other on the keyboard with **T** (for Top) the uppermost of the four. The **F** and **G** keys are below the **T** key with the **F** (word leFt) key to the left of the **G** (word riGht) key. The **V** key is the bottom key of the four and is like an arrow pointing to the end of the text file.

Cursor Movement (continued)

[CTRL] >   scroll down

The [CTRL] > command scrolls the display down one line of the text file.

[CTRL] <   scroll up

This command scrolls the display up one line of the text file.

[GRAPH] >   fast scroll down

The [GRAPH] > command forces Tasword to scroll down 22 lines (one screenful). This is a useful way of scrolling quickly down through your text.

[GRAPH] <   fast scroll up

Tasword scrolls up a screenful of lines (22) when this key is pressed.

[CTRL] →   tab

This command moves the cursor to the next tab position to the right of its current position. The tab positions are set to every eighth column. This default tab setting may be changed by the user in the Customise Program option (see page 23).

[CTRL] ★   Capitals to lower case

If there is a capital letter at the current position then this command replaces it with the equivalent lower case letter. This command, in conjunction with auto-repeat, is useful if a section of text has inadvertently been typed with **ALPHA LOCK** set.

[CTRL] +   lower case to Capitals

This command replaces a lower case letter at the current cursor position with the equivalent capital letter.

[ALPHA LOCK]

The [ALPHA LOCK] key toggles capitals lock on and off. When capitals lock is on pressing a letter key types a capital letter. A message at the bottom of the display shows when [ALPHA LOCK] is on.

Formatting Commands

[CTRL] Q   move text left

This moves the text under and left of the cursor left one character position. There is no effect if there is already a character at the left margin. Text within margins is not affected by this command and if the cursor is inside a margin no text is moved.

[CTRL] W   centre line

This key centres the text on the line containing the cursor between the margins. It is useful for headings. Text inside margins is not moved and there is no action if the cursor is inside a margin.

[CTRL] E   move text right

This key moves the text under and to the right of the cursor right one character position. There is no action if there is a character on the right margin. Text inside margins is not moved and there is no action if the cursor is inside a margin.

[CTRL] J   rejustify paragraph

This key reforms the text from the line containing the cursor to the end of the paragraph. The end of the paragraph is detected by the occurrence of a blank or an indented line. The **[CTRL] J** key is very useful for tidying up text in which you have made insertions and deletions.

Only the text within the margins is reformed and the reforming is to the current margin positions.

The **[CTRL] J** command will right justify the text if Right Justify is on and will leave the text "ragged right" if Right Justify is off. The **[CTRL] J** command can therefore be used to change the format of a paragraph from right justified to ragged right and vice versa.

[CTRL] K   justify line

The line that the cursor is on is right justified by this key.

[CTRL] U   unjustify line

The line that the cursor is on is unjustified by deleting any surplus spaces between words.

[GRAPH] J   Right Justify On/Off

This command key turns the automatic right justification Off or On. The "R/J" message at the bottom of the screen tells you the current status. Justification is described on page 5. When justification is On the text typed will be reformed at the end of each line to the right margin (as in most of this manual). When right justification is Off the text has the "ragged right" appearance of this paragraph.

[GRAPH] W   Word Wrap On/Off

This command is used to turn the automatic word-wrap Off or On. The "W/W" message at the bottom of the screen indicates whether the word-wrap is On or Off. Word-wrapping is described on page 5.

The Search Command

[GRAPH] F   find or replace text

This facility allows you to find the next occurrence of a given word or to replace all the following occurrences of a given word with another word or group of words. The implementation of this command key is from the current cursor position. (To find or replace from the beginning of the text use the **[CTRL] T** command key first to get to the start of the text.)

When the **[GRAPH] F** key is pressed Tasword asks you to type the word to be replaced or found. You must type a single word — Tasword will not accept your input if you include spaces.

Press **[ENTER]** after you have typed the word that is to be replaced or found and Tasword will ask you for the text that the word is to be replaced with. Just press **[ENTER]** to find the next occurrence of the word you typed. To replace all the following occurrences of the word that you specified type the replacement text and press **[ENTER]**. The replacement text can include spaces but most be no longer than the smaller of the space between the current margin settings or 64 characters.

Tasword will reform each paragraph in which it replaces text according to whether right justification is on or off and to the current margin settings. Use this command with care if you have used different margin settings for different parts of your text.

When Tasword is attempting to find or replace text the **[ESC]** key may be pressed to abort the process and return to the text file.

Delete Commands

[DEL] delete character
The [DEL] key deletes the character under the cursor and moves the cursor and the remainder of the line left one character position. Note that characters which are mis-typed can be typed over once the cursor has been moved to the correct position and you do not have to use the [DEL] key to do this. The delete key is useful for correcting mistakes as they are made and for removing unwanted characters.

[SHIFT] [DEL] forward delete
This command is similar to the [DEL] command described above except that the cursor is not moved left. Repeated use of this command is useful for deleting a word or group of characters in front of the cursor.

[GRAPH] [DEL] delete line
This key deletes the line that the cursor is on. All subsequent lines are moved up.

[CTRL] X clear text file
All text is removed from the text file when this key is pressed. To prevent accidental erasure Tasword asks for confirmation when this key is pressed.

[CTRL] Z delete block
This command deletes a marked block of text. The block commands are described on page 17.

Insertion Commands

[CTRL] I insert line or character
This key is used to insert new lines, words, and characters into the text file.

To insert a blank line position the cursor at the beginning of the line following the line to be inserted. Press [CTRL] I to insert the new line. (New lines are inserted automatically when insert mode is turned on — see [GRAPH] I below).

To insert additional words between existing words position the cursor on the space between the words. Pressing [GRAPH] I again to create additional blank lines to type on as required or turn insert mode on (see below).

To insert a character into the middle of a word position the cursor over the character to the right of the required position. When [GRAPH] I is pressed the line is unjustified (see page 12 for the meaning of this) and a space is created for the new character to be typed. If the line cannot be unjustified then a new line will be created as described in the previous paragraph.

These insertion procedures will usually destroy the justification of the paragraph. The justification can be recovered using the [CTRL] J key (see page 12).

[GRAPH] I insert mode On/Off
When insert mode is turned On Tasword creates a new blank line for you to type on whenever a line of text is completed or [ENTER] is pressed. Turning insert mode On is useful when you want to type some lines of text in the middle of some existing text. The "Insert" message at the bottom of the screen shows the current state of the insert mode.

Margin Commands

[CTRL] A   set left margin

When this key is pressed the left margin is set to immediately before the current cursor position. The margin setting is indicated by screen colour. The use of margins is described below. The left arrow may be used to move the cursor into the left margin either to type text or to reset the margin.

Tasword loads with the left margin set to column 5. This default may be changed by the "Customise Program" option (pages 23-24).

[CTRL] S   clear margins

This key resets the margins to the default positions.

[CTRL] D   set right margin

This key sets the right margin to immediately after the cursor position.

The maximum right margin position is at column 64. Tasword loads with the right margin set at column 60. This default setting may be changed by the "Customise Program" option described on pages 23-24.

When margins are set the text that is typed will normally be put only between the two margins. Word-wrap and justification take place as though the margin positions represent the edges of the screen.

Margins are useful for automatically indenting part of your text. Paragraphs can be highlighted by having different margin settings, or a list of paragraphs can be typed and numbering and other annotations can be put within the margins.

The cursor moving arrows can be used to move the cursor into the margins to set new margin positions or to type text within a margin. The [CTRL] Q, [CTRL] W, and [CTRL] E text moving and centering commands do not affect the text inside the margins and do not work at all when the cursor is within a margin. The [CTRL] I text insertion command does not operate inside margins except when the cursor is in column 1. The [CTRL] J command rejustifies just the text that is between the left and right margin. The find and find and replace commands only search within the margins. The automatic paragraph rejustification that takes place on text replacement may modify the format of text that has been typed with different margin settings and should be used twith care if you have typed parts of your text with different margin settings.

Block Commands

[CTRL B]   mark beginning of block

Blocks of text may be moved or copied from one part of the text file to another. The beginning and end of the block of text must be 'marked' before it can be moved or copied. The [CTRL] B key is used to tell Tasword that the line of text that the cursor is in is the first line of a block. Tasword will mark the beginning of the block by inserting five open-square-bracket characters above the first line of your block.

There is a short delay when this key is used while Tasword checks that there is not already a Beginning of Block Marker in the text file. You cannot have more than one Beginning of Block Marker in the file at any one time.

To delete a block marker move the cursor to the line containing the marker and use the [GRAPH] [DEL] command key to delete the line.

[CTRL] N   mark end of block

This key is used to mark the line that the cursor is on as the last line of a block of text. Tasword marks the end of the block by inserting five close-square-bracket symbols on the line below the line containing the cursor. There is a delay while Tasword checks that there is not already an end of block marker in the text.

Use the line delete command [GRAPH] [DEL] to delete a block marker.

[CTRL] M   move block of text

A block of text that has been marked is moved to a new position when the [CTRL] M key is pressed. The text is moved to new lines that are created above the line containing the cursor when [CTRL] M is pressed.

[CTRL] C   copy block of text

The action of this command key is identical to the move block [CTRL] M key described above except that the block of text is copied to a new position rather than moved.

[CTRL] Z   delete block of text

A marked block of text is deleted when the [CTRL] Z command key is pressed provided that the cursor is not inside the marked block.

Other Command Keys

[CTRL] [ENTER]   save/load/merge/print text

This command key is usually used to save, load, and print text files. The following list of options is displayed when **[CTRL] [ENTER]** is pressed. This list of options is called the main menu. (The numbers in brackets refer to the page number in this manual on which each option is described.)

Print text file	P	(p. 19)
Save text file	S	(p. 7)
Load text file	L	(p. 8)
Merge text file	M	(p. 8)
Return to text file	R	(p. 18)
Tasmerge (if installed)	T	(p. 18)
Back-up program	B	(p. 7)
Define printer control	D	(p. 25)
Customise program	C	(p. 23)
Warm start to DOS	B	(p. 18)
Catalog/change drive	Z	(p. 18)

Pressing R will take you back to the text file. Pressing W to go into DOS allows you to do other tasks while still holding Tasword in memory. To leave DOS and re-enter Tasword type GO and press **[ENTER]**.

The catalog/change drive option displays a directory of the files on the current drive and allows you to select another drive as the current drive.

When the main menu, reproduced above, is displayed on the screen a word count, character count and line count is also displayed. (The character count is approximate as it includes space characters within the text.) The free space in the text file, in terms of the number of characters free, is also displayed.

The Tasmerge option in the main menu refers to a mail-merge type program which can be combined with Tasword to allow, for example, multiple prints of a standard letter each containing a name and address taken from a list of names and addresses held in a Tasword text file. This program is expected to be available in Summer 1985.

[GRAPH] P   page break display On/Off

The **[GRAPH] P** command is used to switch the page break display between On and Off.

When the page break display is On a dashed line appears across the screen to show the page breaks. This shows where one page will end and the next page will begin when the text file is printed.

FUNCTION KEYS   printer control characters

The function keys at the top of the keyboard allow you to type the printer control characters whose use is described on page 22. The printer control characters appear on the screen as block graphics symbols.

Printing Text

To print part or all of a text file use the **[CTRL] [ENTER]** command to obtain the main menu shown on page 18. Select the 'Print text file' option by pressing P. The print menu will appear on the screen and is reproduced below:

```
start at line (1)
finish at line (last)
number of copies (1)
line spacing (1)
continuous or single sheet (C) C/S
form feed at page breaks (N) Y/N
print page numbers (N) Y/N
    at top or bottom (T) T/B
    at middle or sides (M) M/S
    start numbering at (1)
left margin on printing (8)
form feed after printing (N) Y/N

press ENTER for default settings
F7      to start again
FO      at any time to print
ESC     to return to main menu
```

With this menu showing on the screen just press **FO** to print your text file.

Tasword Einstein has a comprehensive set of print options. The first time user is recommended to by-pass these options by just pressing the **FO** key to print the text file.

The options in the print menu are described in detail beginning on the next page.

Printer Terminology

A **form feed** is a special code that is sent to the printer. The printer interprets it as an instruction to move the paper to the beginning of the next page.

The **form length** is the number of lines of the text file printed on each page of paper. In this manual the form length does not include the additional lines printed on each page as a result of the printing of page numbers, or a line spacing of greater than 1.

A printer performs a **linefeed** when it moves the paper forward by a line. The computer instructs the printer to perform a linefeed by sending it a particular code, usually the number 10 decimal.

A **carriage return** is the action performed by the printer in moving the print-head to the left side of the paper. The computer sends a carriage return code, usually 13 decimal, to tell the printer to do this. Most printers have an internal switch which may be set so that a linefeed is performed automatically on receipt of a carriage return signal. Tasword by default sends both linefeed and carriage return. If you get unexpected double line spacing either change the switch setting in the printer or use the customise Tasword option (pages 23-24) to set the code for linefeed to zero.

The Print Options

The print menu shown on page 19 consists of a number of options. There is a default answer to each option which is shown in brackets. If any option is answered by just pressing **[ENTER]** then the default answer is selected. If FO is pressed, in order to jump the remaining options and begin printing, then the default answers are selected for the remaining options.

If a non-default answer is given to any of the options after the first two then these answers become the default options for subsequent print commands while Tasword remains in the computer. Furthermore, if Tasword is saved (page 9) then the current default options are saved as the new default print options. In this way you can create a customised copy of Tasword that has as default the print options that you use most often. (See also program customisation on pages 23-26.)

START AT LINE

Enter the line number of the line in your text file that you wish the printing to start at. The default is line 1.

FINISH AT LINE

Enter the line number that is to be the last line to be printed. The default is the last line of the text file containing text.

NUMBER OF COPIES

Enter the number of copies of the text file that you wish to be printed. If you are printing more than one copy and you want each copy to begin on a separate sheet then enter Y to respond to the 'form feed after printing' question below (page 21).

LINE SPACING

Enter 2 for double line spacing and three for triple line spacing and so on. If you print out text with a line spacing greater than one and you require form feed at page breaks then you will have to redefine the form length (the number of text lines on the page) as the program counts the number of lines of text printed and not the intervening blank lines.

CONTINUOUS OR SINGLE SHEET

If you are using continuous (i.e. fan fold) stationery then respond by pressing **C**. Press **S** if you are printing onto single sheets.

If you specify single sheet then the program will perform an automatic form feed at each page break and then halt. A message on the screen invites you to feed the next sheet of paper into the printer and to press a key to continue printing.

FORM FEED AT PAGE BREAKS

This question is asked if continuous stationery is specified in the above option. If you specify that you do want a form feed at the page breaks then after printing out a number of lines equal to the form length (page 19) on each page the program will force the printer to do a form feed so that no printing is performed on or near the perforations between the sheets.

PRINT PAGE NUMBERS

Respond Y for yes to this option if you require a page number to be printed on each page.

The next three options are only appropriate if you specify that you do require page numbers printing.

AT TOP OR BOTTOM

Use this option to choose whether the page numbers should be printed at the top or the bottom of the printed page.

AT MIDDLE OR SIDES

You can choose to have page numbers printed either in the middle of the page or at the sides. 'Middle' and 'sides' in this context refer to the margin positions as set in the text file when the **[CTRL] [ENTER]** command was used to leave the text file.

If you specify that page numbers should be printed at the sides then odd numbers will be printed at the right hand side of the page and even numbers will be printed at the left hand side.

START NUMBERING AT

Enter the number that you require the page numbering to start at. This is useful with large documents which have to be stored on disc in separate parts.

LEFT MARGIN ON PRINTING

This margin is separate and distinct from the left margin in the Tasword text file. A left margin on printing is a number of spaces that are sent to the printer at the start of every printed line.

The default left margin on printing is 8 character positions. This is ideal is you have typed your text at sixty four characters per line and are printing onto A4 size paper as it gives equal margins on each side of the paper.

FORM FEED AFTER PRINTING

Answering Y for yes to this option gives a final form feed at the end of the printing. The page number is printed at the bottom of the page if selected.

Printer Control Characters

Tasword Einstein helps you make effective use of the capabilities of your printer by providing sixteen user definable printer control characters. The printer control characters are the block graphics symbols obtained by pressing the grey function keys at the top of the keyboard and also by holding SHIFT down and pressing the function keys.

Each printer control character has a sequence of up to four printer control codes associated with it. The appropriate sequence is sent to the printer whenever Tasword comes across a printer control character during printing.

You may, for example, define a printer control character to be the sequence of codes that instructs your printer to print enlarged text (if your printer has this capability). Then you can simply type this printer control character into your text and the text following will be printed in the enlarged form.

Tasword Einstein comes with the printer control characters defined as shown on the first help page (see page 6) for the Tatung TP80 printer. Some of these codes are valid for other printers.

You can define your own sequences of printer control codes to be associated with the printer control characters by going through the 'Define printer control' facility described on page 25.

The part of the help page that lists the printer control characters can be edited (see pages 9 and 24).

The sections of printer manuals that deal with control codes vary in both clarity and terminology. See Appendix 1 (page 27) for an explanation of some of the terminologies used in printer manuals.

Example

The program is provided with the ■ symbol defined to send to the printer the code for a space followed by the Tatung TP80 sequence of codes that tell the printer to begin underlining. The ■ symbol is similarly defined to be the terminate underlining sequence of codes followed by a space.

The following text in the text file: this is an■example■ of underlining

will be printed as: this is an <u>example</u> of underlining

PRINTING NORMAL CHARACTERS

The ascii code associated with each normal character is sent by default when the text file is printed.

The 'Define printer control' option (page 25) allows you to define a sequence of up to three codes to be output for any normal character on printing. You may want to do this, for example, in order to print accented characters. You could define the codes associated with a particular character to be the code for a character, followed by the backspace code, followed by the code for an accent. This assumes that your printer has such codes.

Program Customisation

Tasword Einstein contains a comprehensive set of options that allow the user to create a version of the program suited to personal requirements and preferences. Whenever the program is saved onto disc it is saved in its currently customised form. You can therefore customise the program, save it onto disc, and subsequently load your own customised program. This obviates the need to customise the program whenever you load it. Keep the original disc as your back-up copy.

It is recommended that you refer to the relevant sections in the following part of this manual whenever you go through the program customisation options.

To customise your Tasword Einstein press the **[CTRL] [ENTER]** command key while Tasword is running to obtain the main menu shown on page 18. Press C to choose the 'Customise program' option. Tasword then asks the following sequence of questions:

DESCRIPTION	OLD	NEW
tab setting	(8)	
text colour	(207)	
margin colour	(244)	
left margin default	(4)	
right margin default	(60)	
lines per page	(55)	
gap page no.s – text	(3)	
carriage return	(13)	
linefeed	(10)	
form feed	(12)	
cursor flash rate	(18)	
keyboard repeat delay	(5)	
printer output code	(5)	
unlock help (Y/N)	(N)	

Pressing **[ENTER]** in response to any of the above options will cause the next option on the list to be presented.

The numbers in brackets are the current default values held within the program. They are supplied on the disc with the values shown above.

To specify a new value for any of the above parameters type the new value and press **[ENTER]**. To keep the current default value you can just press **[ENTER]**. A cursor indicates the question that the program is currently asking.

TAB SETTING

This specifies the tab positions. The default setting is every eighth character position.

TEXT COLOUR

This specifies the colour, or brightness on monochrome monitors, of the text and background colours. The number to be entered should be:

16 × foreground colour + background colour

MARGIN COLOUR

This specifies the colour of the margins and of the text within the margins. The number entered is calculated in the same way as the text colour.

LEFT MARGIN DEFAULT

A number which is one less than the left margin setting when the program loads. Monitor owners change this to 0.

RIGHT MARGIN DEFAULT

The right margin setting when the program loads. Monitor owners change this to 64 for maximum length lines.

LINES PER PAGE

The program is supplied with the number of lines per printed page set to 55.

GAP PAGE NO.S — TEXT

This is the number of blank lines between the page numbers, if printed, and the body of the text.

CARRIAGE RETURN

The printer code for carriage return, usually 13.

LINEFEED

The printer code for linefeed, usually 10 but may be set to zero if the printer does an automatic linefeed on receipt of carriage return.

FORMFEED

The printer code for form feed, usually 12.

CURSOR FLASH RATE

A number in the range 0-255. The lower the number the faster the rate of flash.

KEYBOARD REPEAT DELAY

This controls the time for which a key must be held down before it auto-repeats. Enter a number in the range 0-255. The smaller the number the shorter the auto-repeat delay.

PRINTER TYPE

5 for the parallel printer port, 6 for RS232.

UNLOCK HELP Y/N

TASWORD has the facility to edit the help pages via the [CTRL] L and [CTRL] P command keys as described on page 12. This facility is normally inhibited so that you do not accidentally erase either part of your text or the help page. Subsequent use of the [CTRL] L command whilst in the text file copies the help pages into the top forty eight lines of the text file (overwriting any text that is there). The [CTRL] P command, if enabled, puts the top forty eight lines of the text file into the relevant area of memory and then re-inhibits the [CTRL] L and [CTRL] P command keys.

You may wish to edit the printer control character part of the help page if, for example, you have redefined some of the printer control characters so that they have different functions from those described on the help page.

Define Printer Control Characters

This customisation option allows a sequence of up to four codes to be associated with any of the printer control characters. The printer control characters are the sixteen block graphics symbols obtained by pressing the eight function keys and [SHIFT] and the eight function keys.

The program is supplied with the codes for the printer control characters defined to be control code sequences for the Tatung TP80 printer that give the effects shown on the first help page (see page 6). Some of these control code sequences are valid for some other printers. All the printer control characters may be redefined by the user.

To define printer control characters to be particular sets of control codes for your printer press D for 'Define printer control' from the main menu shown on page 18.

A list of the printer control characters together with their currently defined sequences of codes will be shown on the screen. The program will prompt you to press a key in order to specify which printer control character you wish to define a sequence for. When you have specified the printer control character that you wish to redefine the program will prompt you to input a sequence of codes. Type in up to four codes, pressing [ENTER] after each one. If your sequence is less than four numbers then terminate the sequence by just pressing [ENTER]. Tasword will then redisplay the printer control characters and associated codes. You can redefine another printer control character by pressing the appropriate letter key or press [ENTER] to exit from this customisation option.

The printer control code sequences are entered as decimal numbers. Appendix 1 indicates how these numbers may be determined from the information given in some printer manuals.

A printer control character occupies a character position in a line of the text file. If the control code sequence does not cause a character to be printed then the justification of the printed text will be lost, as a line containing a single such printer control character will be a character shorter on printing than a line that does not. This effect is avoided by including the code for a space in the sequence of codes. The program is provided with the underline characters including such a space.

Define Normal Print Characters

This customisation option allows a sequence of up to three codes to be associated with any of the normal characters. When the character is printed it is this sequence of codes that is sent to the printer.

The program is supplied with a single code associated with each normal character. This code is the ASCII code for that character. You may wish to define some other code or sequence of codes for some character in order to, for example, print accented characters as mentioned on page 22, or to define your printer code for a £ sign (see appendix 2 for the printing of £ signs).

This option may be selected by specifying **D** for 'Define printer control' from the main menu shown on page 18. When the printer control characters are shown on the screen and **[ENTER]** is pressed to indicate 'finished' you are given the option to 'Define normal print characters'. Press Y for yes and the program will prompt you to type a character.

If you type a character the program will show the sequence of codes currently associated with that character and invite you to type in a new sequence of codes. Type up to three sets of numbers, pressing **[ENTER]** after each number. To terminate the sequence with less than three numbers just press **[ENTER]**.

If you press **[ENTER]** to terminate the sequence before entering the first code then the character will have a 'null sequence' associated with it and nothing will be printed for that character.

Example

In this example the normal * character will be made to produce a 'plus or minus' ± sign on printing.

Enter the 'define normal print characters' option and type a * in response to the 'type a character you wish to define a sequence for' question. The program will show the 'old' code or sequence of codes associated with the * character and invite you to type in a new sequence of codes.

We wish the printer to print, in place of the *, first a + sign, then to do a backspace (move back a character), and finally to print the underline character __.

The ASCII code for a + sign is 43.
The code for backspace on most printers is 8.
The ASCII code for a __ character is 95.

Type 43, then 8, and then 95, pressing **[ENTER]** after each. The * character will now be printed as a ± sign.

Appendix 1 — Determining Printer Control Codes

The printer control characters are obtained by pressing the eight function keys and pressing the eight function keys in conjunction with **[SHIFT]**. These characters are placed in the text to control the printer. Each printer control character can be defined to be a list of up to four codes. These codes must be entered in the 'define printer control characters' option (see page 25) as decimal numbers. This can lead to confusion as printer manuals use a number of methods for specifying control code sequences.

Many printer control code sequences begin with ESC. The decimal code for ESC is 27.

Some printer manuals specify control code sequences in terms of characters. For example, the control code sequence to turn emphasised printing on may be given as:

ESC E

The decimal code for ESC is 27. The decimal (ASCII) code for E is 69. Therefore, to enter the above control code sequence as decimal numbers in the 'define printer control characters' option enter the two decimal numbers:

27   69

Some printer manuals give control code sequences in terms of hexadecimal numbers. The ESC E control code sequence used in the above example is specified in a number of ways in hexadecimal, including the following:

ESC   45h

1Bh   45h

The h specifies that the number is in hexadecimal. Not all manuals use this convention.

Appendix 2 — Printing £ Signs

The pound sterling sign is not a standard ASCII symbol. Different printers use a variety of codes for the £ sign. The common ones are 35, 96, and 129.

It is often necessary to alter a switch inside the printer. This normally selects a £ sign instead of a hash sign.

TASWORD is supplied with the £ sign defined to be sent as a 35 to the printer. You can use the 'define normal print characters' option described on page 26 to change the code sent for a £ sign to, for example, 96.

Addendum — Tasword for the Einstein 256

The program disc contains two versions of Tasword:

TASWORD	for the Tatung Einstein
TASWORD 2	for the Tatung Einstein 256

This manual describes both programs. The following amendments apply to the version for the Einstein 256.

(1) Loading and Running TASWORD (page 7)

To load Tasword on the Einstein 256 type

TASWORD 2

(2) Move block of text (page 17)

On the Einstein 256 the command to move a block of text is **[CTRL] H**