XII. Tabs

There are two *types* of horizontal tab settings available in Bravo. In Sections A and B each type of tab is described and the method for setting it given.

No tab setting in Bravo can be actually set while typing text--they are all set with paragraph look commands, and they all require a distance specification. Consequently, to enter tabulated text initially, you must type the text, hitting the **TAB** key at each point where a tab will be needed, then select the paragraph and give a command or series of commands to reconfigure tab stop(s) to the position(s) desired.

A. Regular Interval Tab Settings

Bravo has "default" tabs preset at 1/4" (18 point) intervals. They act just like tab settings on a typewriter--a tab between text will move to the *next* 1/4" point on the screen, rather than 1/4" *from the point where the tab is hit*.

This regular interval tab of 1/4" can be reset to any interval--1/2" or 1", for example. The *paragraph look command* used to reset it is:

Select paragraph(s)
look
TAB key
=
1.0"
ESC

The **=** in this command is used to tell Bravo that *all* tabs are to equal the distance specified--in this example that is **1.0"**.

If this command is applied to paragraphs early in the document, it will remain in effect for paragraphs appended to them. If it is used as an editing function after all of the text has been typed, all paragraphs to be affected should be selected before the command is given--if all paragraphs are not contiguous, several individual selections will have to be made.

Regular interval tabs are being discussed first because they are the tabs in effect until others are set. However, for *almost all* formatting requirements involving text paragraphs or tabulated columns, *they will not be appropriate*. Tab requirements for hanging indents, and for tabulated columns are best achieved by using the tabs described in B, below.

B. Specific or "Named" Tab Settings

This type of tab is the most generally useful tab available in Bravo. Any horizontal position across the screen may be set with a tab stop. A line of text may begin on the left margin (85) and have tabs set at 120, 250 and 400 points--this is simply an example; any combination of tab stops can be set.

With "named" tab settings, *up to* 15 tabs can be set on a line, identified (named) with the numbers 1-9 and the letters a-f. 1 (the numeral one) is the first tab and f is the 15th tab.

The paragraph look command for setting specific tabs is:

Select paragraph(s)
look
TABkey
1 (for example)
distance
ESC

After typing **l** ook**TAB1**, the mouse buttons may be used to determine the distance of the tab stop. E.g.,

Red to select a character on the screen which the tab is to line up with.

Yellow to select a paragraph with tab 1 already set, and "copy" that setting to the paragraph(s) being changed.

Blue to select any horizontal point across the screen where the tab is to fall.

The distance selected with any of these mouse buttons will be displayed in the left most set of squiggly brackets in the system window--points within the left brackets; inches in the middle brackets. When the distance desired appears in those brackets, hitting the **ESC** key will cause Bravo to apply that distance to the tab being set.

The "anatomy" of this command, both what you type and what the system responds with, is:

To a selected paragraph(s) type: **l**ook
TABkey

Bravo responds: **LOOK: Type tab code (1-9, a-f, =)**

meaning, do you want a specific tab? If so, *which* tab: 1-9, a-f? Or are you setting a regular interval tab, in which case = is the tab code used. Answer this question with the number of the tab being set:

1

for example.

Having typed **1**, Bravo responds with:

LOOK: Specify tab stop, confirm with ESC.

At this point the mouse buttons may be used to determine the distance from the left margin where the tab will be set; or the distance can be typed. After doing one or the other, type:

<u>Esc</u>

and the distance specified will take effect in the document.

The same procedure is followed to set tab 2, and tab 3, and tab 4, etc. through tab f, the 15th tab. Named tabs must be set individually.

XIII. Moving/Duplicating Text -- System Buffers

The three sets of squiggly brackets (braces) in the system window contain various pieces of text, and the text changes periodically. These brackets serve as temporary storage areas (buffers) for Bravo, and they contain text manipulated in the course of editing or creating a document. The buffers are numbered as follows:

1 {last deletion} 2 {last insertion} 3 {search key}

So, the buffer on the left is numbered 1, and contains text most recently deleted from the document. Buffer number 2 contains text most recently inserted. Buffer number 3 contains the text of the most recent search--this buffer is described in XIV. "Search and Substitute Options."

One of these buffers will be marked with a "*" to indicate that it is the "current" buffer. Any of the buffers may be *made* current with the command **b**uffer#**ESC**. Before typing ESC there is an opportunity to type or select text which will take the place of the text already in the buffer. If the text already there is wanted, type ESC, and the command will simply make the buffer current.

The contents of these buffers will be displayed in visible mode--i.e., spaces, tabs, CR’s and ^CR’s will be represented. Also, since the buffer is small and cannot contain larger blocks of text, the text is elided. Bravo displays the beginning of a text string, then an ellipsis (...) to indicate that more text intervenes, and then the end of the string of text.

A. Delete Buffer

When text is deleted from a file, the deleted text goes into the delete buffer (buffer 1). It will reside there until another deletion is made, at which point the more recent deletion will take its place.

Text in the delete buffer may be restored to the document. Occasionally, text needs to be deleted from one point in a file and moved to another point. The delete buffer makes this possible without retyping the text.

For example, a paragraph at the end of a document should appear nearer the beginning. The sequence for effecting this move is:

Select the paragraph to be moved.
delete the paragraph.
Select the point at which it is to appear nearer the beginning of the document.
Give either an **i**nsert or **a**ppend command, whichever is appropriate.
Hit the **ESC** key.

After typing **ESC**, the deleted paragraph will be inserted in its new position in the document.

This operation works because following a delete command, *the delete buffer is current*. Whenever an insert, append or replace command is "defaulted" (**ESC** is typed instead of supplying text from the keyboard), *Bravo uses text from the* *current buffer*.

B. Insert Buffer

The insert buffer (buffer 2) works much like the delete buffer, though it is not functional in moving text from one point to another unless the text is to appear in *both* places--be copied in a second location, but not deleted from the first position.

If there are several insertions involving the same text, the text need only be typed once. Text inserted into the document, also goes into the insert buffer. Therefore, if you select a second point in the document and type **i** _nsert **ESC** the text from the insert buffer (the current buffer following an insert) will be placed in the document at the position selected.

These buffers may be confusing until they have been used a few times. A good way to get a sense of what is happening is to delete a string of text and notice the change in contents of the delete buffer. Then give an **i** _nsert command with another point in the document selected, and hit the **ESC** key. The text from the delete buffer will appear in the document; it will also appear in the insert buffer and that buffer will get the *, making it the current buffer.

At the outset these buffers seem like a shell game in which you try to guess where the pea is; however, they can be quite useful in moving text without retyping it, and duplicating the same text in different locations.

C. Copy Selections with Append, Insert, Replace

Following an **a** _ppend, **i** _nsert or **r** _eplace command, a secondary selection of text appearing elsewhere in the document can be made. **ESC** following the secondary selection will cause the selected text to be placed at the position indicated by the primary selection. The sequence is:

> Select *point* at which text is to be appended, inserted, or the text which is to be replaced.
>
> Type **a** _, **i** _ or **r** _
>
> Make a secondary (dotted underline) selection of the text to be copied, and type **ESC**___.

The text of the secondary selection will be copied to the position initially indicated. The text of the secondary selection is *not deleted and moved*; it is a *copy* placed at another location--it will appear in *both* places following this command. If text is to be deleted and moved to another position, see Delete Buffer, above.

XIV. Search and Substitute Options

Bravo provides several facilities for jumping to a particular point in the document; for substituting one string of text for another; and for making *selective* substitutions.

A. Jump Command

When editing a lengthy document, scrolling to a point several pages away may not be the quickest way to access the next edit. The **j** _ump command allows you to type a string of text in the document which Bravo is to find and display at the top of the screen.

The **j** _ump command begins its search with the *second line on the screen, and continues searching to the end of the document. It does not start again at the beginning.* Therefore, make sure that the second line of text on the screen appears at an earlier point in the document than the text being located. An easy way to search the entire document, is to type **en** __ (**e**_verything **n** _ormalize) before giving the jump command.

The sequence for the command is:

jump
type the text string to be located
Esc

Text typed will appear in the Search Buffer--buffer number 3. Bravo will pay attention to capitalization and to punctuation, but will not differentiate text on the basis of font size or character looks--i.e., you need not type the text in boldface because it appears in the document in boldface, but you must capitalize characters that are capitalized in the document. In fact, you cannot specify only boldface instances of a text string without jumping to the intervening instances of the text string which are not boldface.

Once **Esc** has been typed, Bravo will search the document; when the text string is found, the line containing it will appear at the top of the screen.

If there are several instances of the string of text, Bravo will find the first one and place it at the top of the screen. To find the next instance of that same string, type **Esc**-- **Esc** causes Bravo to repeat the last command. You can do this several times if necessary, though choosing a *relatively* unique string of characters the first time will be less time consuming.

B. Substitute Command

The **s** _ubstitute command allows you to type a new text string which is to be substituted for an existing text string. E.g., **s** _ubstitute $$$$$ (for) Bravo.

Substitute *operates only on the text selected*--within a paragraph, within a line of text, throughout the entire document. A certain amount of care should be taken when making widespread substitutions, however. Bravo will take the command quite literally. If you are substituting "this" for "that" and Bravo finds an instance of that which appears within a word, it will change it to this. When substituting one word for another, it is best to type a space in front of the word before turning the substitute command loose on your document.

The sequence of the command is:

select the amount of text to be affected

substitute

type text *you want*

Esc

...FOR (question asked by Bravo)

type text you *do not want*

Esc

The text *to be substituted* appears in the middle (insert) buffer; the text to be changed appears in the Search Buffer, since that is the text Bravo will search for in order to insert in its place the text in the insert buffer.

When the substitute command is activated, Bravo asks that you "type or select" the text to be substituted. A string of text in the document may be selected instead of being typed from the keyboard--the selection is a secondary selection and will appear with dotted underlining.

C. **Find Command** - Selective Substitutions

The find command has two uses. It can be used just like the jump command for locating a particular point in the document. However, there are two differences between Jump and Find:

Find starts the search *from the end of the current selection,* not from the second line of text on the screen, and

When it finds the text and places it at the top of the screen, *it makes that string of text the current selection*--it will be underlined and take the place of whatever text was previously selected. The jump command does not change the selection in this manner.

So if you use the find command to get to a point which is to be edited, that text will be selected and a command can be given to alter it.

The second use for find is to change *some* instances of a text string, but not *all* instances. With the substitute command there is no opportunity to say *which* instances are changed--they all are.

To *selectively* substitute text using the find command, the sequence is:

find

type the text to be located

Esc

When the text has been found and is the selected string at the top of the screen, type:

replace (do not use insert or append)
type the new text
ESC

Now, to move to the next instance of that string of text, type:

find
ESC

and Bravo will move to the next instance, display it at the top of the screen, and select it. From this point on type either:

yes

to repeat the replace command--to make the substitution--and then move on to the next instance; or type:

ESC

to *make no substitution* and go on to the next instance.

The find command does not constrain you to continue hitting **ESC** to the end of the document. When all the instances to be changed *have been* changed, simply start something else--Bravo is in a "Ready" state after either **y** or **ESC** are typed, so the command can be discontinued at any point. Be sure all the changes have been made before interrupting with another command; once the order of the command has been interrupted, the entire command will have to be initiated again, starting with find and typing the text, etc.

This ends the material presented in Part II. Part III describes the use of multiple windows; vertical tabs for placement of text; document profile options such as line numbers, odd and even headings, and multiple column printing; Bravo’s calculator; and some introductory information for Maxc users. If you do not have a need for these features, there is no need to go on to Part III.

Part III

Part III covers the remaining Bravo features: Windows: Page Boundary; Vertical Tabs; Document Profile; and some standard Calculator functions. There is also a section for Maxc users, though it covers only a small portion of the File Transfer Program and describes how to print Bravo files from Maxc.

After completing Part III there will still be a vast amount of information about the Alto and Maxc operating systems which has not been touched on in this Bravo outline. Further Alto documentation is contained in the *Alto User's Handbook*, and Maxc documentation in the *Tenex Executive Manual*, and the *Tenex User's Guide*.

XV. Windows

All editing and text entry operations to this point have involved the use of one document window. It is possible to open many windows and have *a separate file* in each window, or to have many subwindows, each providing a different view *into the same document*. While many windows are possible, their use is not recommended, and this section discusses the use of only one additional window or subwindow at a time. There are two reasons for this approach: 1) Handling more than two windows strains the system and increases the possibility of a Bravo failure; and 2) describing only one additional window at a time can be done with greater clarity.

There are two *types* of window available: 1) a *new window* in which *a separate file* can be displayed; and 2) *a subwindow* which provides an additional view into the *same file*.

Two separate methods for manipulating windows are discussed. Sections A and B discuss new and subwindow manipulation using a *specific* mouse button for each operation. Section C discusses a keyboard option which allows any of the mouse buttons to be used after the desired operation has been indicated with a single character keyboard command. Read through both methods and choose the one you prefer. Both methods require mouse selections; however, with the method described in Section C, it is not necessary to remember what each mouse button means--five single character commands must be memorized, after which any mouse button can be used. Many people prefer this method of window manipulation because fewer distinctions need to be remembered. It would be a good idea to choose one or the other of these methods since remembering both will be quite confusing. However, it will be necessary to read all three sections since information about how to use windows--possible applications, moving text blocks across window boundaries, etc.--is contained only in Sections A and B. It is not repeated for the Keyboard Options described in Section C.

A. New Window *(two windows/two documents)*

A second window makes it possible to excerpt text from another file on your directory for use in the file currently being created; to reference information in another file without printing the file; and to join two separate files together.

When a new window is created, it has a broad black border identical to the original window, and the filename of any document read into the new window will appear within its border.

Open New Window

Using this method of window manipulation, a mouse button specifies both the *kind* of window and where its boundary is to be placed. To create *a new window*, *into which a separate document* can be read, type **w** _ for window, place the cursor against the left margin at the vertical height where the new window boundary is to be placed, then hold down the **Blue** button for at least a second. While the button is still depressed, the window *boundary* can be changed by moving the cursor up or down; when the button is released the boundary will freeze.

When a new window is opened, the end-of-file marker in the new window is selected. Selecting anything in a document makes the window containing the selection "current." Therefore, with the end-of-file marker selected, a command to **g** _et a file will read that file into the newly created window. The window containing a file with *selected text* is the only window that will be affected by keyboard commands. To make a window "current" or active, simply select any block of text within it.

With two files, one in each window, text can be transferred back and forth between them. To take a block of text from one file and insert it into another file, select the point *at which text is to be inserted*, type **i** _ for insert, then make a copy selection of the text in the other file, and hit the **ESC** ____ key. This is the same sequence that would be followed with *a single file*. Deleting text from one point and moving it to another, or inserting text from one file into another file, *works the same across a window boundary as it does within a single file*. If text is to be deleted from one file and placed in another, select the text to be deleted, delete it, select the point at which it is to appear in the other file, type **i** _ for insert (or **a** _ for append), then hit the **ESC** ____ key--again, the same operation that would be performed when dealing with a single file.

To join two separate files together, select the last paragraph of the first file, type **a**_ for append, then make a copy selection of all, or the pertinent part of, the second file, and hit **ESC** ____.

A new window can also be used to facilitate formatting a complex document. Once the formatting levels are established, a *file* with several paragraphs, each containing a particular format needed in the document, can be created and read into the new window. Then when one of these formats is needed in the document, it can be adopted with a copy selection to the **l** _ook **a**_ll command.

Change New Window Boundary

If the window originally opened provides too much or too little space, its boundary may be changed. Type **w** _ for window, then place the cursor in the broad black border of the window boundary to be changed. Now hold down the **Red** button and while it is depressed, move the cursor to the new vertical position for the boundary. The existing boundary will follow the cursor's movement until the button is released, then the boundary will freeze.

Destroy New Window

When the additional window is no longer needed, it can be destroyed. Type **k** _ for kill, place the cursor in the window *to be destroyed* and push either the **Red** or **Blue** button. **Red**, *with the cursor placed in the bottom window* will kill the bottom window and give the full screen to the top window. **Blue**, *with the cursor placed in the top window* will kill the top window and give the full screen to the bottom window. *Be sure to put the file on your disk before killing a window in which changes have been made to the document it contains.* If the file has not been **p** _ut, Bravo will require a confirming **CR** to destroy the window; however, it will not explain *why* confirmation is being requested.

Clear Contents, Leave Window

To "clear" a window of its contents and leave the window, type **k**_ for kill, then place the cursor in the window to be cleared and push the **Yellow** button. This action is equivalent to **w**_indow **c**_lear. Again, if changes have been made, put the file before clearing the window, though if the file has not been put on the disk, Bravo will ask for a confirming CR before clearing the window. This should be taken as a reminder to **p**_ut the file if changes you care about have been made.

Summary of New Window Commands

The following chart summarizes the commands for creating a new window, moving its boundary, clearing and destroying it. After typing either **w**_ or **k**_, the mouse buttons work as follows:

window

Red	Moves window boundary
Blue	Opens new window and places its boundary at height of cursor.

kill

Red	*With cursor in bottom window*, kills that window, gives full screen to top window.
Yellow	With cursor in top or bottom window, erases the *contents of that window*, leaves the window.
Blue	*With cursor in top window*, kills that window, gives full screen to bottom window.

The yellow mouse button with a **w**_indow command has no application for a *new window*, but it is functional in creating a "subwindow" which is discussed in Section B, below.

B. Subwindow *(two windows/one document)*

A *subwindow* differs from a new window in that subwindows *look into the same document*. The original window and the subwindow can be scrolled independently, making it possible to view two separate areas within a file, but both windows contain *the same file*. Any change made to the document in *either* window will take effect in the other window--i.e., *you are always working on one document*.

Inserting text from one point in the document at another point works the same way across a subwindow boundary as it does with full screen display of the document. Deleting text from one point and inserting it elsewhere also works the same. The only difference is that both areas can be made visible at once, making scrolling during the command unnecessary.

A subwindow is also useful with certain formatting tasks. With levels of formatting, several paragraphs can be added to the end of the document, each containing a formatting level used in the document. Then when that level is required for new text, it can be adopted easily with a **l**_ook **a**_ll command, using one of the paragraphs at the end of the document as the copy selection. Having these formats established and continually visible saves either scrolling through the document to find an instance of the formatting desired, or giving a series of commands to format new text.

Open a Subwindow

To open a subwindow using this method of window manipulation, type **w**_indow, then place the cursor along the left side of the screen at the height the subwindow is to appear, and hold down the **Yellow** button for about a second. Subwindows have no broad black border to accommodate a filename since they *cannot contain a separate file*. A thin black line marks their boundary.

Change Subwindow Boundary

If the subwindow originally opened is too large or too small, its boundary can be changed in exactly the same way as a new window boundary is changed--type **w_**, place the cursor on the existing boundary line, *hold down* the **Red** button while a new boundary is traced with the cursor; when the button is released, the boundary will freeze.

Destroy Subwindow

When the subwindow is no longer needed, type **k**_ill, place the cursor in the bottom window and push the **Red** mouse button. The distinction made between **Red** and **Blue** for killing a *new window* can also be made for a *subwindow*. However, since the *same file is in both windows and any changes made in one window take effect in the other,* it does not matter which window is destroyed. The only advantage to choosing which window to kill is in keeping one of the selected points visible after the other window is killed. When this option is not a consideration, an easy method for killing *subwindows* is to type **k**_, place the cursor in the bottom subwindow and push **Red**.

Because a subwindow contains the same document as the original window, there is a mouse button which should not be used if the intention is to clear *only one* of the windows. **K**_ill and the **Yellow** mouse button perform the operation: erase the contents, leave the window. Be careful of this combination when working with subwindows. Its only use is to *clear the entire screen* of *all text*--i.e., using it with subwindows assumes that a new document is to be read in for which a subwindow is also desired. It *cannot be used to clear the subwindow only*. Also, a **k**_ill, **Yellow** cannot be "undone"--this is one of the places in Bravo where **u**_ndo does not work. If you type **k**_ followed by **Yellow** in a subwindow and have not put the file, it may require a replay to get it back--Bravo asks for a confirming CR when the file has not been put, but it will not explain *why* confirmation is requested. Typing **DEL** instead of a confirming CR will cancel the **k** _ill command and the file can be put on the disk normally.

Summary of Subwindow Commands

The following chart summarizes the commands for creating a subwindow, moving its boundary, destroying it, and clearing the contents of both the original window and the subwindow. After typing **w** _ or **k**_, the mouse buttons work as follows:

window

Red	Moves subwindow boundary
Yellow	Opens a subwindow and places its boundary at cursor position.

kill

Red	With cursor in bottom subwindow, kills the subwindow, gives full screen to top window.
Yellow	With cursor in either window, clears the entire screen--both windows--of all text.
Blue	With cursor in top window, kills that window, gives full screen to bottom subwindow.

With **w**_indow, the **Blue** mouse button has no application for *subwindows* since **Blue** creates a *new window*. Using either **Red** or **Blue** as they are described above in combination with **k**ill, will produce the same result--the document, all edits included, will be displayed full screen.

C. Creating, Moving, Destroying Windows--Keyboard Option

Sections A and B above described window manipulation using *specific* mouse buttons for operations desired.

A second option for window manipulation consists of the **w** _indow command with the following sub-options:

window	**n**ew	To create a *new window*
window	**s**plit	To create a *subwindow*
window	**m**ove	To adjust window boundary
window	**d**estroy	To destroy a new or subwindow
window	**c**lear	To clear the contents, leave the window.

After you type **wn** ___, **ws**, **wm**, **wd**, or **wc**_, any mouse button may be used to either indicate a boundary or select a window. With this method of window manipulation, no distinctions need be made between which mouse button to use--the operation is described by the second character, rather than by a specific mouse button, and once the operation is specified, all mouse buttons are synonomous.

To create a new window, type **wn** ___ and use any mouse button to indicate where the new window boundary should appear.

To create a subwindow, type **ws** __ and use any mouse button to indicate where the subwindow boundary should appear.

To move a window boundary, type **wm** ___ and use any mouse button to trace the desired new or subwindow boundary.

To destroy a new or subwindow, type **wd** ___, place the cursor in the window to be destroyed and push any mouse button--Bravo displays the message "select window" after **wd**__ is typed. If a *new window* is being destroyed and the file has not been put on the disk, Bravo requests a confirming CR before honoring the command.

To clear the contents of a *new window*, type **wc** __. Bravo responds with the message: "select window." Any mouse button may be used to select the window to be cleared. If the file has not been put on the disk, Bravo requests a confirming CR before honoring the command. **W** __indow **c**_lear with a *subwindow* will clear the entire screen of all text; however, if the file has not been put on the disk, Bravo requests a confirming CR before honoring the command.

D. Page Boundary

While editing or creating a document, Bravo makes no attempt to indicate where the pages will break when the file is printed. Page Boundary can be used to determine page breaks before sending for final copies of the document, and while the document is reconfigured into pages, it can be edited until the pages break correctly. Page Boundary can also be used to determine whether a block of text will fit *on one page*--again, it can be edited until the text fits one page before being sent to the printer.

Use a file that is *at least* two pages long when experimenting with Page Boundary for the first time; otherwise it will be difficult to see how all of its features work.

When Page Boundary is activated, Bravo will assume that *the first character* of the current selection is the first character on a page and will calculate page breaks from that point. If page breaks are being determined for the entire file, scroll the document to the beginning and select the first character that will appear on page 1 before initiating the page boundary command. Or, if there is a known page break (because a ^L--manual page break--has been entered), you can begin after the page break by selecting the first character to appear on the page following the ^L.

Activate the Page Boundary command by typing the **LF** __ (linefeed) key on the keyboard.

After typing **LF**, Bravo will break the screen at roughly the middle and open a subwindow. The third line in the subwindow will be underlined, indicating that it is the line with which the next page *will begin*.

Typing **LF** again will cause Bravo to move to the next page. Then the third line in the subwindow will indicate the line with which that page will begin.

Page breaks for the entire file can be determined by typing successive **LF**'s until the end of the file is encountered.

Page Boundary also duplicates hardcopy in that the *line breaks* indicated duplicate those in the printed document. Either line breaks or page breaks can be edited while Page Boundary is in effect. Manual page breaks can be entered where appropriate; or **l** _ook **k**_eep commands can be used; and any line editing necessary can be done.

The page boundary command leaves the line which starts a page at the top of the screen; the first line of the next page will be the third line in the bottom subwindow and it will be selected (underlined). Each page should be edited individually for line or page breaks before going on to the next page. To verify the effects of any editing, reselect the beginning of the page (top line in top subwindow) and repeat the **lF** __ command. Bravo will honor the edits and reconfigure the page accordingly. When each page has been edited, and all lines and pages break satisfactorily, send the file to the printer.

To get out of Page Boundary and return to full screen, standard font display, two separate actions must be taken--type:

> **w**indow
> **d**estroy

Then place the cursor in the bottom subwindow and push any mouse button. (The other method is to type: **k** _ill, place the cursor in the bottom subwindow, and push the **Red** mouse button.)

The above action cancels the second window opened by Page Boundary. To restore standard font display, type:

> **e**verything **l** _ook **H**__ardcopy (**elShiftH**____)

XVI. Vertical Tabs

By setting paragraph looks with distance specifications, and/or specific tab stops, text can be placed on the page at precise *horizontal* positions. The same precision is possible for *vertical* positions on the page with the use of vertical tabs.

A vertical tab is set on *a* paragraph--the *same* vertical tab is not set on a series of paragraphs, as horizontal tabs may be. If the same vertical tab is set on two or more paragraphs, the text of those paragraphs will overprint--second paragraph prints *on top of* first, third paragraph prints on top of second on top of first, etc. When a vertical tab is set the text *will be placed as specified*, even if that means overprinting existing text.

The command to set a vertical tab is:

look
z
distance
Esc

The command to *remove* a vertical tab is:

look
z
\ (backslash, not /)
Esc

There are several points to keep in mind when using vertical tabs:

1. A vertical tab can only be set on existing text--it is a paragraph look with a distance specification, a combination not possible in Bravo while typing.

2. The distance set for a vertical tab is measured *from the bottom of the page*--e.g., setting a vertical tab of **2.0"** ____ will cause text to begin printing 2 inches *up from the bottom of the page*.

3. A vertical tab setting on a paragraph "goes with" the paragraph, just as left margin and horizontal tab settings do. Therefore, appending to or inserting in front of a paragraph with a vertical tab, will cause the new paragraph(s) to "pick up" the *same* vertical tab. Overprinting of paragraphs will be the result.

4. Horizontal tabs *may* cause a page to break. Vertical tabs do not cause a page break, though if set on the *first* paragraph of several pages of text, subsequent page breaks will occur normally.

5. If a vertical tab is used to place text as the top line on the page, its y leading and the x leading of the first line will be omitted. If a vertical tab is used to place text in the middle or at the bottom of a page containing other text, the vertical tab specifies the start of the y leading, not of the text itself. E.g.,

if a paragraph set with y leading of 24 points is assigned a vertical tab setting of 4", and other text precedes it on the page, the 4" vertical tab will specify the point at which the y leading begins, and the text will appear 24 points down from 4". Heading text entered into the document profile and set with a vertical tab always has y and x leading honored. A simple way to deal with this inconsistency is to check the y setting on a paragraph to receive a vertical tab (**l** _ook **?_** to the paragraph), remove any y leading, then set the vertical tab for the specific point where the text is to appear.

There are a variety of applications for vertical tabs. One of the major uses is to specify text placement for headings in the document profile (discussed in the Document Profile section following). However, there are formatting functions *within* the document for which vertical tabs are useful. Several formatting applications are discussed below (not an exhaustive list) in which vertical tabs are combined with manual page break directives to achieve desired effects.

A. Title Page

The example below describes formatting a page which contains a centered title 4 inches down from the top of the page, and a paragraph at the *bottom* of the page for organizational credits--"This project was funded and supported by...."

Both paragraphs are typed *(as separate paragraphs*). Then a vertical tab is set on the *title* paragraph:

look
z
7.0"
Esc

Then a separate vertical tab is set on the credits paragraph:

look
z
2.0"
Esc

At the end of the text (credits) paragraph, a manual page break is entered, ensuring that any text following that paragraph will appear on the next page--i.e., after the period ending that paragraph, type **l^s** ___.

No change in the text will appear on the screen, but the directives entered will be honored when the document is printed.

B. Footnotes

Bravo has no actual footnote feature; however, it is possible, if painful, to format footnotes which appear at the bottom of the page. For only a few (half a dozen) footnotes, it may be worth the trouble. If there are many footnotes, strong consideration should be given to an end-of-chapter footnote style.

No effort should be made to format bottom-of-the-page footnotes until a *final* copy of the text in which they appear has been obtained. The text of a footnote is entered after the last line of text that can appear on the page, still leaving room for the footnote at the bottom. The footnote is a separate paragraph, and gets a vertical tab setting depending on the length of text it contains--the example below assumes 1.0" of footnote text.

Example

A final copy of the paper or report has been printed and footnotes are to be entered. Decide where to break a footnoted page by determining how much text can appear on the page when a footnote must appear below the text and when a l" margin is to remain. E.g.,

Last line of text to appear before the footnote.

(white space)

footnote text(**l^s ___**)

(1’ bottom margin)

After the last line of text, append the footnote paragraph, and end the footnote text with a **l^s** ___. Then select the paragraph and type:

look
z
2.0" (l" is left for bottom margin)
ESC

The footnote, containing 1 inch of text, will print 2 inches from the bottom of the page, leaving a l inch margin below it.

The footnote ends with a manual page break (**l^s** ___) to ensure that any text following it will begin on the next page.

This process does not sound very odious; however, in practice it gets cumbersome since as the text is broken on one page, subsequent text moves down on the page and for the second and following pages where footnotes appear, it gets more and more difficult to determine where the text should be broken without reprinting the file to see how text is reconfigured by earlier footnotes. Page Boundary can be useful in this regard, though editing extensively while in Page Boundary proceeds slowly.

C. Figures/Illustrations

If figures or illustrations are to be added to a page, there will be constraints on where the text describing them appears. Vertical tabs make it possible to dictate where descriptive text appears and can also be functional in providing white space for illustrations.

Example

A block of text has been typed, the next thing to appear in the document is a figure which will take up 6 inches on a page, and a block of descriptive text directly underneath the figure which will require 2 inches. The figure and the text describing it will appear on a separate page.

At the end of the last line of text to appear on the page *preceding* the figure page, type **l^s** to break the page, then type the descriptive text for the figure, then type another **l^s**.

Now set a vertical tab on the figure text, indicating where it will appear on the page--**lz3.0"Esc**, for example. The result of these actions is that a page has been set aside with 6 inches of white space to accommodate the figure, and the descriptive text has been placed on the page to appear directly underneath the figure.

Vertical tabs serve a wide variety of formatting needs--the above examples are given only to provide a "feel" for how they might be used.

XVII. Document Profile

Most forms on the disk contain a document profile of some type, with directives for headings, page numbers, margins, etc. When none of the forms satisfies your needs, a document profile may be devised which does.

The document profile given below contains *an example line* for each possible option; it does not define a specific document. In general, any of the lines may be omitted, and fields within a line may be omitted, depending on the profile needs for the document. The categories are typed with either spaces or tabs for separation; and control carriage returns are used for *necessary* paragraph breaks (see below).

A. Document Profile Options

Page Numbers: Yes X: 527 Y: 10.5" First Page: 79 Not-on-first-page
Columns: 2 Edge Margin: 60 Between Columns: 40
Margins: Top: 1.3" Bottom: 1" Binding: -13
Line Numbers: No Modulus: 5 Page-relative First Line: 1
Odd Heading: Not-on-first-page

XVII. Document Profile

Even Heading:

Bravo Course Outline

This document profile consists of *four* paragraphs:

1) "Page Numbers" *through* "Odd Heading" is *one* paragraph.

2) **XVII. Document Profile** is *one* paragraph.

3) "Even Heading" is *one* paragraph.

4) **Bravo Course Outline** is *one* paragraph.

On *all* of the paragraphs, a *profile property* must be set, marking the information as a series of directives. To set the profile property, select *all four paragraphs* and issue the command:

look
;

To remove the profile property, the command is:

look
: (shift;)

Also, the heading lines (*actual text for headings in the document*) are given a vertical tab setting for placement on the page. If headings and page numbers both appear at the top of the page, they will carry the same vertical tab setting. Page numbers in this profile (see explanation below) appear 1/2" from the top of the page on the right margin. The odd and even headings should also appear

1/2" from the top of the page so they print on the same line as page numbers. To set vertical tabs on each heading, select them *individually* and to each heading paragraph issue the command:

```
look
z
10.5"
ESC
```

Having given both the "profile property" command and the vertical tab commands, the document profile is complete. It should appear as the *first thing in the document*. It is wise to type at least one paragraph of the actual document before returning to set the profile property and vertical tabs for headings. If the heading paragraph containing the profile property and vertical tab is appended to, subsequent paragraphs will also carry profile property and vertical tab settings. The result will be an: "error in document profile" message from Bravo when the file is printed. This problem is somewhat difficult to discover since exhaustive changes may be made to the document profile before realizing that settings on the actual text of the document are causing the error.

B. Document Profile - Line by Line

Page Numbers: Yes X: 527 Y: 10.5" First Page: 79 Not-on-first-page

If page numbers are not wanted, "no" follows Page Numbers. X is measured *across* the screen; 527 is the default right margin, the horizontal point at which the page number will appear. Y is measured up and down on the screen; 10.5" is a vertical tab setting which will place the page number 10-1/2 inches up from the bottom of the page, 1/2" down from the top of the page.

First Page: 79 stipulates the number with which page numbering should begin. If First page does not appear, page 1 is assumed. Not-on-first-page indicates that no number is to be placed on the first page of the document. If Roman numerals are wanted, type the word Roman in the Page Numbers line:

```
...First page: 79     Roman     Not-on-first-page
```

for example, and type Roman in Uppercase if Roman numerals are to appear in uppercase.

Columns: 2 Edge Margin: 60 Between Columns: 40

If single column (full page) printing is to be used, this line can be omitted since full page is the default. If multiple column printing is wanted, type the number of columns. Edge margin sets the amount of white space on the *left and right* sides of the page. Between Columns sets the amount of white space between two columns of text. (See Double Column Printing, below.)

Margins: Top: 1.3" Bottom: 1" Binding: -13

The top and bottom margins may be set as desired. If binding appears, it assumes that the document is to be printed on both sides of the paper. Binding sets the amount of white space to be added to the inner side of each page, facing the binding--i.e., text is displaced along the binding by the distance set, making the margin *along the binding* slightly wider than the margin on the outside of the page.

The binding distance is calculated by first centering the text on the page--default margins (85 left and 527 right) center the text. Then the amount of displacement is decided based on the margin distance desired. E.g., margin distances left and right are 85 points (85 left margin; 612 full page -85 points = 527 right margin). If the margin distance along the binding is to be 98, and the margin distance along the outside 72, binding is calculated: 72-85= -13 binding distance.

Line Numbers: No Modulus: 5 Page Relative First Line: 1

If line numbers are requested, they will appear along the left margin. Modulus indicates the interval at which line numbers are printed--Modulus: 5 means, number every 5th line. Page-relative indicates that line numbers are to begin anew on each page. First line indicates the line at which line numbers should begin. Modulus: 5, Page-relative, and First Line: 1, will result in the first line of the document being numbered l; then the 5th line is numbered 5; the 10th line numbered 10, etc. And this numbering will begin again at 1 for each page of the document. If Page-relative is omitted, the lines will be numbered consecutively throughout the entire document.

Odd Heading: Not-on-first-page

XVIII. Document Profile

The Odd Heading prints on odd numbered pages (1,3,5). If Not-on-first-page appears with Odd Heading and not with Even Heading, the first page to get a heading will be the second page of the document. A **^CR** is typed to end the Odd Heading line.

The actual heading typed after this Odd Heading directive can be centered, placed on the left margin, can be boldface, and/or in another font. A **^CR** is typed after the text of the heading. Heading text may consist of more than one line, but it cannot consist of more than one paragraph--normal CR's may be used, but two separate paragraphs with separate vertical tab settings (for top and bottom of a page, for example) may *not* be used.

Even Heading:

Bravo Course Outline

Even Heading works just like Odd Heading except that the heading text supplied will appear on even numbered pages only. The Even Heading line is ended with a **^CR**.

The heading text can be centered, boldface, and/or in a different font. A **^CR** is typed after the text of the heading. Heading text may consist of more than one line, but it cannot consist of more than one paragraph--normal CR's may be used, but two separate paragraphs with separate vertical tab settings (for top and bottom of a page, for example) may *not* be used.

C. Other Heading Options

A document profile with Odd and Even Headings assumes that the document will be printed on both sides of the paper--even page numbers on the left side; odd page numbers on the right side. When the document is *not* to be printed on both sides of the paper, Odd and Even headings are inappropriate--a simpler heading can be used:

Heading:
Bravo Course Outline

This heading consists of two paragraphs. Both are given the profile property (**l**ook**;**) and **Bravo Course Outline** is given a vertical tab setting of 10.5" if it is to print 1/2" down from the top of the page as default page numbers do. The headng text may be centered, boldface, and/or in a different font. Text for this heading, like odd and even headings, may consist of more than one line of text, but it cannot consist of more than one paragraph.

Page numbers beginning on the second page of the document are the default in Bravo, and with this type of heading directive, the default is for the heading to begin on the second page of the document also. Therefore, with these two document profile lines, the result will be that on the *second and following pages*, the heading will appear on the left margin, and the page number will appear on the right margin, both at the top of the page.

This type of heading can be combined with the other profile options. For example, if page numbering is to start at some point other than page 2, enter the line:

Page Numbers: Yes X: 527 Y: 10.5" First Page: 79

The Page Number/First Page option is useful when the length of a document dictates that it be prepared in two or more files; page numbering may be *set for the second file,* then when both files are printed, page numbering is consecutive.

D. Double Column Printing

To obtain double column printing Bravo must be given distance specifications for:

1. Edge Margin (amount of white space on the left and right edges of the page)

2. Between Columns (amount of white space separating the two columns of text)

3. Right margin setting in the document.

Edge Margin (em) and Between Columns (bc) settings are decided on the basis of preference. The right margin setting for text, however, must be calculated by first deriving the column width for text, and adding the left margin setting.

In the following explanation, edge margins are 60 points, and the between column distance is 40 points. Using these figures, the width of a text column can be calculated, and when that figure is known, the right margin to be set in the document can be calculated.

left edge (margin)	= 60
between columns	= 40
right edge	= 60
	160

The total space available across a page is 612 points (8.5" x 72pts/inch), less 160 (amount of white space) = 452 points of space remaining to accommodate 2 columns of text, and 452/2 = column widths of 226 points. So,

left edge (also left margin)	= 60
column width	= 226
right margin	286

Margins in the document are therefore set at 60 and 286:

look**l**eft**60Esc**
look**r**ight**286Esc**

The document profile line reads:

Columns: 2 Edge Margin: 60 Between Columns: 40

Once margin and document profile settings have been assigned, Bravo will configure the text in two equal columns, break the pages and resume double column printing on subsequent pages.

Double Columns - Miscellaneous Information

1. To verify the distances, see that all 612 points of space are accounted for:

left edge	60
1st column	226
Between columns	40
2nd column	226
right edge	60
	612 points

2. If heading and page numbers are to be used, their placement should match the far right margin in effect for double columns. E.g., the X setting for page numbers should not be 527 (the default right margin); it should be set to correspond to the right margin of column 2--lm 60 + cw 226 + bc 40 + cw 226 = 552 right margin. Thus, for the example used above the X setting for page numbers would be 552.

   And the left margin set when heading *text* is typed in the document profile should be the same as the left margin set in the document--in the example above it is 60 points.

3. Either finish all text entry and editing before resetting the left margin at 60, or give the command **w** _indow**e**_dge**60Esc** . If one of these methods is not used, setting the left margin at 60 will truncate some of the text along the left side of the screen--text placed left from 85 points will *print* as specified, but it will not show up on the screen unless window edge is reset.

   [The window edge is set at 85 points--the default left margin--unless a new window edge boundary is specified. To restore the window edge to 85 points, give the command **w** _indow **e** _dge **85** **Esc** . Note that applying a **lF** _ (page boundary) command or a **l** _ook **h** _ardcopy command returns the window edge setting to 85.]

E. Double Column Printing - Centered Title

To center a title over Column 1, the title is simply typed and centered with the margins set appropriately--for the example above, margins throughout the document are set at 60 (left) and 286 (right). Bravo will center the title over Column 1, and continue with double column formatting.

However, if the title is to be centered across the full page with double column printing following, several additional formatting specifications must be made.

In the following example, the distances being used are: Left margin (lm) 60; column width (cw) 226; between columns (bc) 40; right edge (re) 60.

With multiple column printing a ^L (**l^s** _) means go to the *next column*, not to the next page. Two consecutive ^L's means go to the next page. To center a title across the full page with double columns following, proceed as follows:

1. The document profile reads:
   Columns: 2   Edge Margin: 60   Between Columns: 40

2. Margins for the *text* of the document are set at 60 and 286.

3. The title is inserted and centered with margins *for that paragraph only* set at 60 and 552 (full page centering). The right margin for full page centering is calculated by adding: lm 60 + cw 226 + bc 40 + cw 226 = 552, or by subtracting (em) 60 from 612 = 552.

4. Then a vertical tab is set on the title paragraph--**l** _ook **z**_ **9.0"** **Esc**, for example.

5. Decide how much text can fit in Column 1 based on how far from the top of the page it will begin to print--3" for this example. Then set a vertical tab on *the first paragraph* of Column 1 of **8"** __. Where column 1 is to end, type a ^L (**l^s** ___) which will be read as a directive to go to the next column, not the next page.

6. Set a vertical tab on *the first paragraph* of column 2 of **8"** __ so it will print at the same height as column 1. At the end of column 2 (you must determine where that is) type two consecutive ^L’s (**l^s** ___ twice), which will be read as a page break directive.

7. If standard double column formatting is to proceed from page 2 throughout the remainder of the document, nothing further need be done. The document profile reads: Columns: 2   Edge Margin: 60 Between Columns: 40, and the margins in the text are set at 60 and 286--that is all the information Bravo needs to format double columns.

More information and several hints about starting a file "from scratch" is contained in Appendix A.

XVIII. Calculator

Bravo has a simple calculator. For full details about it see the *Alto User's Handbook*. This section describes only its most standard features.

The calculator can be used either by typing numbers directly into it from the keyboard, or by selecting numbers within the file and *entering* them into the calculator.

A. From the Keyboard

At any point *while Bravo is in a ready state*, numbers can be typed to the calculator; no command need proceed the number. When the first numeral is typed, the system window reads:

NUMBER

and the number typed is displayed in the insert (middle) buffer of the system window. For example, 1500 is typed from the keyboard and it appears in the insert buffer. To enter it in the calculator, type \ _ (backslash, not /). After typing backslash (*enter*), 1500 is placed in the search (far right) buffer, where a running total is displayed.

To divide 1500 by 3, type:

3
/ (division operator)

and the total in the search buffer will change to 500.

To multiply the total (500) by 3, type:

3
***** (multiplication operator)

and the total will change to 1500.

To subtract 500 from the total, type:

500
- hyphen (subtraction operator)

and the total changes to 1000.

To add 500 to the total, type:

500
+ or = (addition operators)

and the total returns to 1500.

To get a percentage of the total (1500), type:

5
%

and the total changes to 75.00.

B. Selections from a File

To enter a number from the file into the calculator, select it and type

\ (enter)

That number can then be affected by any of the operators--i.e., select another number in the file and type **+** or **=**, **-**, *****, % or **/**. The total in the search buffer will display the new sum. Or a number can be typed from the keyboard followed by one of the operators and the search buffer will display the result. For example,

Select the number 500 in the file
type \ (enter)
select the number 3 in the file
type *

or:

Select the number 500
type \ (enter)
type the number 3
type *

In either case, whether 3 is selected from the file or typed from the keyboard, the search buffer will display the sum 1500.

C. Decimal Point Options

The number of digits after a decimal point is initially set at 2. However, it can be changed. 0-9 are the options. The command to change it is:

calculator
#

There are a variety of features not described here which can be found in the "Bravo Manual" of the *Alto User's Handbook*.

XIX. Maxc Users

Discussion of Maxc (PARC's timesharing computer facilities) is beyond the scope of this outline. However, *brief* mention of the File Transfer Program available between Maxc and your Alto does seem appropriate, along with information about printing Bravo files from Maxc. The *Alto User's Handbook* contains an *FTP Manual*, and the *Tenex User's Guide* describes many of the subsystems available on Maxc.

A. File Transfer Program

This discussion of FTP assumes that you have an account on Maxc and have done some form of login on the Alto.

There are a variety of uses for file transfers; several of which are:

1. To backup important files by storing them on Maxc. **[This procedure has been superseded at many locations by various IFS (interim file storage) capabilities. In Palo Alto, relevant documentation can be found on [Maxc1]<IFS>HowToUse.bravo, .ears, .press. This new procedure should be the one adopted for backing up files from your Alto.]**

2. To make Bravo files generally available to other users by putting them on Maxc.

3. To access relevant files from Maxc in order to supplement "forms" files; obtain newly implemented features; update existing Alto systems.

In fact, it would be difficult to use an Alto for an extended period *in the Parc environment* without needing to access or store files on Maxc.

The FTP (File Transfer Program) transfers a file on your disk to Maxc; or retrieves a file from Maxc and puts it on your disk.

To the Alto Executive type:

FTP MAXC (*type* the space preceding Maxc)

and then type a **CR** ___. After the CR is typed, the screen will be reconfigured into 3 windows, the middle one reads:

```
Alto Pup FTP User
*OPEN Maxc
<Maxc1 Pup FTP Server Version # Date
*
```

The last * is followed by a blinking bar, and it marks the point at which any keyboard command will be displayed.

Only two FTP operations are discussed here. They are **st** __ore a file from your disk on Maxc; or **ret** ___rieve a file from Maxc and put it on your disk.

Store

To store a file from your disk on Maxc, type:

st (st and one space)

FTP will complete the phrase:

stORE local file

Then it will wait for a filename to be typed. Type the filename and a **CR** ___. FTP will then respond with:

as remote file filename

and will pause for confirmation. It repeats the filename in order to verify that the file is to be called by the same name when stored on Maxc. A **CR** ___ confirms the request and FTP proceeds to transfer "a copy" of the file on your disk to Maxc--the file will reside in *both* places after completing the command.

FTP indicates what type of file it is transferring (text or binary), its length; then displays the message: Done. Another * with a blinking bar appears and you can either quit from the program or transfer more files. To quit, type:

q
CR

Quitting *automatically* returns you to the Alto Executive level.

Retrieve

To retrieve a file from Maxc, the same process is followed, except that:

ret (ret and one space)

is typed and the transfer proceeds in the opposite direction. The message printed is:

retRIEVE remote file **filenameCR** as local file **filename**

Remote refers to Maxc; local refers to your Alto. These two terms will indicate in which direction the transfer is being made.

B. Printing Bravo Files from Maxc - Ears Version

If Bravo files are being transferred to Maxc for *backup and storage only*, nothing other than actually transferring them need occur. However, if you or someone else intends to send a file to Ears directly from Maxc, an Ears version must be created and transferred to Maxc before printing can occur successfully.

There is a hardcopy option in Bravo for creating Ears versions of Bravo files for printing from Maxc.

After typing **h** _ for hardcopy, Bravo responds:

HARDCOPY: type option (C,S,D,N,F,@,E,P,DEL) or CR to confirm

C is for copies; D is for Diablo printer; E is for Ears format; F is for the Filename of the unprinted file you create; N is for the user Name to be displayed on the cover of the listing; P is for Press format; S is for "start at page **#__**"; @ is for designating your printer's name; DEL aborts the command; and CR to confirm. Type:

e for Ears format

Bravo responds:

EARS format

Now type:

f

Bravo responds:

Type filename for file output, terminated by ESC

Type the name of the file (usually the same *name* it had), and use the extension "Ears." E.g., the file created in Bravo is called: **Memo.Bravo**. The filename for an Ears version is: **Memo.Ears**.

After the filename and **ESC** ____ are typed *and* confirmed with a **CR** ___, Bravo makes an Ears version of the file and puts it on your disk. When that action is complete, Bravo responds with:

READY: Select operand or type command
Last page printed: #

The "last page printed" message is misleading in that the file *has not been printed*. In connection with creating an Ears version, this message should be taken only as confirmation that the operation is complete.

An Ears version is useful *only for printing from Maxc*. It cannot be edited in Bravo or in any editing system on Maxc. Ears versions also take up more space on a disk than their Bravo source files. Therefore, since the Ears file cannot be edited in Bravo and can only be printed from Maxc, once it is transferred to Maxc, it should be deleted from your Alto directory.

> [Similarly, one can create a Press file which can then be printed directly from the Alto Executive (without having to first go into Bravo) using the EMPRESS subsystem available from Maxc on <Alto>Empress.run with documentation on <AltoDocs>Empress.tty. The procedure to create this file would be as above with the **e** _ (ears format) option being replaced by the **p**_ (press format) option and the .ears extension given to the filename (**f** _ option) replaced by a .press extension.]

C. Send Message

The MSG subsystem on Maxc is useful for sending and receiving on-line messages. Documentation for MSG can be obtained by printing the file: <Doc>MSG.Doc. *From Maxc*, the command to print the file is:

@**Ears <Doc>Msg.Doc** followed by a **CR** .

Conclusion

The Outline has attempted to cover Bravo's fundamental features, but it has not and cannot describe either the vast number of possible combinations, or the variety of ways to achieve similar results. Experimentation and continued use of Bravo will reveal both.

Appendices

Appendix A: Starting a File from Scratch

When Bravo is called, the end-of-file marker is the only thing displayed in the document window, and it is selected. Either an insert or append command with Bravo in this state will allow text to be entered.

A document requiring only page numbers--no other document profile option--does not require a document profile line for page numbers. The pagination default is that any document containing no directives will be numbered consecutively beginning with page 2.

Bravo considers paragraphs to be the areas between two ^CR's. It will not respond to paragraph commands until at least one ^CR has been typed. For example, when the end of file marker is on the same line as the text being typed, no paragraph commands (like ^c to center) will be accepted. Therefore, an insert command given with only the end of file marker on the screen must either begin with a ^CR, or the first paragraph must be typed and ended with a ^CR before Bravo will respond to paragraph formatting commands.

When a file is started from scratch it is sometimes easier to enter all paragraphs requiring individual formatting before returning to give formatting commands. E.g., the following format:

Bravo Course Outline
(3" from top of page)

Introduction
(60 points down from title)

Text of first paragraph
(24 point paragraph break)

Text of second paragraph
(12 point paragraph break)

can most quickly be set up by typing all of the paragraphs without stopping to format them, then issuing individual formatting commands until the point at which the format standardizes--with the second *text* paragraph, for example. When starting from scratch, no paragraph breaks are specified; therefore, a ^CR does not provide any white space between paragraphs until some y setting is given to at least one of the paragraphs. (In fact, no formatting is set--paragraphs have no breaks assigned, justification is not in effect, etc.) When the first four paragraphs vary widely in the y setting desired, it is best to input all of them, then return and set the paragraph format individually--centering one and assigning a vertical tab, justifying and setting y distances on others, etc. Any paragraph carrying a vertical tab setting *must* be set individually to avoid appending paragraphs which will carry the same vertical tab and thus cause overprinting.

If the document is to have highly structured levels of formatting, it *may* be possible to set up things like tab requirements early in the document, then use them throughout the document without stopping to set them at each level. For example, the levels of formatting are:

I. **Text** (tab at 120)

A. **Text** (tab at 145)

1. **Text** (tab at 170)

All of these tabs can be set very early in the document since *setting* named tabs has no effect unless they are *used*, but once set they remain in effect for appended paragraphs and can be used when needed.

This approach assumes fairly careful planning before the document is typed. However, a few minutes spent setting up a consistent format will save lengthy editing sessions later.

When there are several formatting levels, it may be useful to set up sample paragraphs with text describing their format, and have these paragraphs at the end of the document. These formats can then be adopted easily with a copy selection to the **l** _ook **a**_ll command. Having these sample paragraphs displayed in a subwindow further facilitates formatting since there is no need to scroll the document to locate desired formats.

Appendix B: Hardcopy (Printing) Options

The hardcopy command has 10 options, seven of which were discussed in the Outline: **e** _ for ears format; **p** _ for press format; **@** __ for printer designation; multiple **c** _opies; **CR** for one copy; **DEL** to abort the command; and **f** _ilename for file output.

When **h** _ardcopy is initiated, Bravo prints the message:

HARDCOPY: Type option (C,S,D,N,F,@,E,P,DEL) or CR to confirm

The options yet to be described are: D for Diablo printer; N for user name; and S for "start at page #".

The sequence for specifying the user name to be printed on the cover of the listing is:

hardcopy

HARDCOPY: Type option (C,S,D,N,F,@,E,P,DEL) or CR to confirm

n

HARDCOPY: Type user name, terminated by ESC

usernameESC

HARDCOPY: Type option (C,S,D,N,F,@,E,P,DEL) or CR to confirm

CR to send file.

The sequence for "start at page #" is:

hardcopy

HARDCOPY: Type option (C,S,D,N,F,@,E,P,DEL) or CR to confirm

s

HARDCOPY: Type page # to start print at, terminated by ESC

4ESC (for example)

HARDCOPY: Type option (C,S,D,N,F,@,E,P,DEL) or CR to confirm

CR to send file.

When "start at page #" is used it takes some time for Bravo to go through the document and figure out where the page specified begins. Once that is accomplished, the file will be printed starting at that page and continuing to the end of the document. This option is useful with the Diablo printer since printing the entire file proceeds more slowly than with Ears.

Diablo Printer

The D option is for Diablo printer. To use this option, make sure paper is loaded in the printer and positioned correctly for printing to begin, then after initiating the **h**_ardcopy command, type:

d

```
HARDCOPY: Type option (C,S,D,N,F,@,E,P,DEL) or CR to confirm
    Diablo Output
```

CR

```
HARDCOPY: Type command (C,R,DEL) or blank to proceed
    Ready to print page 1
```

Typing a **space** (blank) at this point will cause the first page to be printed. C will initiate continuous printing (presuming perforated paper is loaded), and R is to "reprint last page." Unless continuous printing is in effect, the message will be displayed after each page is printed, providing time for the next sheet of paper to be loaded--type a **space** to print the next page, an **r** _ to reprint the last page or discontinue the entire command with **DEL**. However, if **c** _ontinuous printing has been initiated, the entire file will be printed without interruption.

If text is underlined on the screen, the Diablo printer will underline it; it double underlines text which appears in italics on the screen; it completely ignores text which is in a different font on the screen, but leaves the amount of blank space that text would require *if* printed; all margin settings are honored; text with a vertical tab setting will be placed as specified; page breaks occur normally; and headings and page numbers are printed as requested.

Appendix C: Font Summary Sheet

Appendix D: Bravo Summary Sheet

Summary of Commands

Contents

Introduction

The summary lists Bravo commands in two groups: single character keyboard commands are listed in alphabetical order; and all **l** _ook commands are grouped alphabetically, with special character looks (; ? -, etc.) at the end of the Look command section.

Almost no explanation of commands is provided in the Summary; only the sequence of keystrokes required to execute each command is given. However, each command is followed by page numbers, referencing the point in the outline where further explanation is available. Thus, the summary may be used either as a quick reference for a particular command sequence, or as a partial index for the outline.

I. Keyboard Commands

Append

Make a selection
append
type text to be added
Esc

See:

append text string, p. 18
append paragraph, pp. 22-23
append with secondary selection, p. 63

BravoBug

To control the replay, use the following commands:

space Stops the replay. After the replay is stopped, each space causes *one* command to replay.

proceed Resumes replay at full speed.

break before command **#** __ Interrupts the replay at the command number specified.

terminate **Cr** Terminates the replay.

quick Causes typed text to go in all at once. Quick is default mode--it is not needed unless slow has been used.

slow Slows down the replay so text goes in character by character, as it was typed initially.

See Section VIII, pp. 36-38.

Buffer

To make one of the three buffers *current*, type:

buffer
(1-3)
ESC

After typing the buffer number, there is an opportunity to type or select the text the buffer is to contain. If **ESC** is typed without taking advantage of this option, the buffer, with the text it currently contains, is made current.

See Section XIII, pp. 62-63

Delete

Make selection
delete

See pp. 17-18

Diablo Printer Commands

See Appendix C, pp. 96-97.

Document Profile

See Section XVII, pp. 79-85.

Double Column Printing

See Section XVII, pp. 83-85.

Everything

To select the entire document, type:

everything

See p. 33.
Also see **e** _verything **n** _ormalize, p. 34.

Find

find
type text to be found
Esc

Begins search from end of the current selection. When text is found, it is placed at the top of the document window, and it becomes the current selection.

To make selective substitutions, proceed as follows: When text string is found and selected,

replace
type text desired
Esc

Then type:

find
Esc

to locate next instance. From then on, type either:

yes to make the same substitution

or type:

Esc to make no substitution and go to next instance.

See Section XIV, pp. 65-66.

Get

To read one of the files on your directory into Bravo:

get
type or select filename
Esc

See Section I, pp. 3-4.

Hardcopy (Print a file)

Specify format:

hardcopy
p (press)
or
e (ears)

Designate printer:

hardcopy
@
name (of printer, e.g., Menlo, Wonder, Palo)
ESC

Multiple copies:

hardcopy
copies
(of copies)
ESC
CR

Single copy:

hardcopy
CR

See Section I, pp. 9-11.
Also see Appendix B for Diablo Printer options, pp. 95-96.

Insert

Make selection
insert
type text to be inserted
ESC

See:

insert text: p. 18.
insert paragraph: p. 22-23.
insert with secondary selection: p. 63.

Jump

To jump to a specific text string in the document, type:

jump
type text string
ESC

Jump begins its search with the second line on the screen and proceeds to the end of the file; it does not "wrap around"--start again at the beginning.

See Section XIV, p. 64.

Kill

To destroy or clear a new or subwindow, type:

kill

followed by one of the following mouse buttons:

Red With cursor in bottom window, destroys bottom window, gives full screen to top window.

Yellow With cursor in top or bottom *new* window, clears contents, leaves window. With cursor in *either* subwindow, clears entire screen of all text, leaves subwindows.

Blue With cursor in top window, destroys top window, gives full screen to bottom window.

See Section XV, pp. 68-74
Also see **Window** in Command Summary.

LF

See **Page Boundary**

Mouse Functions

There are three *sets* of mouse functions:

1. To select strings of text:

Red Selects a single character or space.

Yellow Selects a word.

Blue Extends a selection through single characters or words, depending on the initial selection.

2. Scroll Bar:

Red Moves line of text opposite cursor to top of document window.

Yellow Scrolls to a relative position in the document--cursor at top of document window scrolls the document to the beginning; cursor at bottom of document window scrolls the document to the end; cursor in the middle of the document window scrolls the document to middle, etc.

Blue Moves line at top of document window down opposite cursor position.

3. Line Bar:

Red Selects the *line* of text opposite the cursor.

Yellow Selects the *paragraph* opposite the cursor.

Blue Extends the selection through lines or paragraphs, depending on the initial selection.

See:
Text selection, pp. 4-6.
Scroll Bar, pp. 15-17.
Line Bar, pp. 20-21.

Normalize

To bring selected text (no matter where it is in the document) to the top of the document window, type:

normalize

See p. 33.

Page Boundary

To initiate the Page Boundary option, type:

LF Key

To cancel Page Boundary, type:

window
destroy
place cursor in bottom window
push *any* mouse button

Then type:

everything
look**H** (uppercase H)

See Section XV, pp. 73-74.

Put

Put
type or select filename
ESC

To store a new version of the *same* file--i.e., use the same filename, type:

Put
ESC

See pp. 8-9 (Put), and pp. 18-19 (Put ESC).

Quit

quit (from Bravo or from the Alto Executive)
CR

See p. 12.

Replace

Make selection
replace
type replacement text
ESC

See pp. 6-7.

Substitute

Select the amount of text to be affected
substitute
type text string desired
ESC
type text string to be changed
ESC

See Section XIV, pp. 64-65
Also see **Find** (selective substitutions) in Command Summary.

Undo

To cancel the effects of the *last* command, type:

undo

Undo works only on the last command given, and only if the selection has not been changed.

See p. 32.

Window

After typing:

window

The mouse buttons work as follows:

Red Moves boundary of new or subwindow--hold down **Red** and move cursor slowly to desired boundary. When **Red** is released, boundary will freeze.

Yellow To create a subwindow

Blue To create a new window

See Section XV, pp. 68-73.
Also see **Kill** in Command Summary.

Window Clear

Typing:

window
clear

clears the document window of all text and simultaneously clears the filename from the black border below the system window.

See p. 33.
Also see pp. 72-73 (multiple windows).

Window Edge

The window edge (left margin of the screen) is set at 85 points unless it is specifically changed. To change the window edge, type:

window

edge

60 (for example)

Esc

To restore window edge to the default, use the same command, with 85 for the distance.

See p. 84.

Window Destroy

To get rid of a new or subwindow, type:

window

destroy

and use *any* mouse button to select the window to be destroyed.

See pp. 72-73.
Also see all of Section XV, pp. 68-74.

Window Move

To move the boundary of a new or subwindow, type:

window

move

and use *any* mouse button to trace the new boundary.

See pp. 72-73
Also see all of Section XV, pp. 68-74.

Window New

To create a *new window*, type:

window

new

and use *any* mouse button to indicate the desired new window boundary.

See pp. 72-73.
Also see all of Section XV, pp. 68-74.

Window Split

To create a subwindow, type:

window
split

and use *any* mouse button to indicate the desired subwindow boundary.

See pp. 72-73
Also see all of Section XV, pp. 68-74.

Look Commands

A brief description of each Look command is given below. The pages following contain individual command sequences for each Look and page numbers for more detailed explanation within the outline.

Look:

**	**a**ll	Alters paragraph format to match that of secondary selection.
	bold	Boldface text.
	center	Paragraph look for centering text.
	CLR (or **BW**)	To cancel special *character* looks--n/a for clearing *paragraph* format looks.
*	**d**own	To offset text down from baseline.
*	**f**irst	Paragraph look to control placement of first line.
	hardcopy	Duplicates line break and character placement when printed.
	italic	Italicized text.
	justify	To justify right margin.
*	**k**eep	To keep blocks of text together--i.e., control where page breaks occur.
*	**l**eft	To set the left margin.
	nested	Indent paragraph by 36 points (1/2")--preset paragraph look.
	open	Adds 12 points of leading to paragraph break--preset paragraph look.
*	**p**aragraph	To set margin for the second and following lines of a paragraph.
	q	Adds 6 points of leading to paragraph break--preset paragraph look.
*	**r**ight	Sets right margin.
**	**s**ame	Alters character style to match secondary selection.
*	**TAB**key	To set "named" or regular interval tab.
*	**u**p	To offset text up from the baseline.
	visible	To get spaces, tabs, CR's, etc. visibly represented.
*	**x**	To set leading between lines--6 pts. = double, 1 pt. = single spaced.
*	**y**	To set leading between paragraphs--12 pts is default leading.
*	**z**	To set a vertical tab. (See Part III)
	0-9	Font changes.
	-	Underlined text.
	^	Superscripted text.
	_	Subscripted text.
	?	With paragraph selection displays paragraph settings; with character selection displays font and character looks.
	;	Sets profile property in document profile specifications. (See Part III)

* Require distance specification.
** Require a secondary selection.

II. Look Commands

All

Select paragraph(s)
look
all
select secondary paragraph
ESC

See p. 56-57.

Bold

Make selection
look
bold

To cancel boldface, type **l**ook**B**.

See p. 20.
For boldface text *while typing*, see p. 23.

Center

Make selection
look
centered

To cancel centering, type **l**ook**C**.

See pp. 29-30.
For centering text *while typing*, see p. 31.

CLR (or **BW**)

To cancel special character looks, select the text and type:

look
CLR (or **BW**) key

See pp. 22.
To clear character looks *while typing*, see p. 23.

Down

Make selection
look
down
type distance in points that text is to be offset.
Esc

See pp. 55-56.

First

Select paragraph(s)
look
first
type or select horizontal position for first line of paragraph.
Esc

See Section XI, 51-55.

Hardcopy

look
hardcopy

To cancel hardcopy mode, type **l**ook**H**.

See pp. 57-58.

Italics

Make selection
look
italics

To cancel italics, type **l**ook**I**.

See p. 20.
For italicized text *while typing*, see p. 23.

Justified

Select pararaph(s)
look
justified

To cancel right justification, type **l** _ook**J**_.

See pp. 29-30.
For right justification *while typing*, see p. 31.

Keep

Select paragraph
look
keep
type distance
Esc

See pp. 34-35.
Also see Manual Page Break, p. 34.

Left

Select paragraph(s)
look
left
type or select horizontal position for left margin
Esc

See Section XI, pp. 51-55.

Nested

Select paragraph(s)
look
nested

Nesting is a preset paragraph indent of 1/2". To cancel nesting, type **l** _ook**N**_.

See pp. 29-30.
To nest paragraphs *while typing*, see p. 31.

Open

Select paragraph(s)
look
open

Look **o**_pen adds 12 points of leading to the break preceding the paragraph. To cancel open, type **l** _ook**O**_.

See pp. 49-50.
Use of open *while typing*, see p. 50.

Paragraph

Select paragraph
look
paragraph
type or select horizontal position for 2nd and following lines.
ESC

See Section XI, pp. 51-55.

q

Select paragraph(s)
look
q

q adds 6 points of leading to the break preceding the paragraph. To cancel q, type **l** _ook**Q**_.

See pp. 49-50.
Use of q *while typing*, see p. 50.

Right

Select paragraph(s)
look
right
type or select horizontal position for right margin
ESC

See Section XI, pp. 51-55.

Same

Make selection
look
same
make secondary selection
ESC

See p. 57.

TAB key

To reset the interval at which *plain tabs* fall:

Select paragraph(s)
look
TAB key
=
type distance in points or inches for plain tab interval
ESC

To set specific ("named") tabs:

Select paragraph(s)
look
TAB key
type tab identifier (1-9 or a-f)
type or select horizontal position of tab stop
ESC

See Section XII, pp. 59-61.

Up

Make selection
look
up
type distance in points that text is to be offset
ESC

See pp. 55-56.

Visible

Make selection
look

visible

Editing, storing the file, printing can be done in visible mode. To cancel visible display, type **l** ook**V**.

See p. 57.

X

select paragraph(s)
look
x
type distance in points for leading between lines of text
ESC

See pp. 51-52, 54.

Y

Select paragraph(s)
look
y
type distance in points for leading between paragraphs
ESC

See pp. 51-52, 54.

Z

Select paragraph
look
z
type distance in inches or points, measured from bottom of page
ESC

To cancel a vertical tab:

Select paragraph
look
z
\ (backslash, not /)
ESC

See Section XVI, pp. 75-78.
For use in document profile, see pp. 79-80.

0-9 (Font changes)

Make selection
look
type the number of the font desired (0-9)

To cancel a font, select the text and type either:

look
CLR

or:

look
type any other font number

See pp. 48-49.
For font changes *while typing*, see p. 48.

- (hyphen for underlining)

Make selection
look
-

See p. 20.
For underlining *while typing*, see p. 23.

^ (superscripting)

Make selection
look
^

See p. 47.
For superscripted text *while typing*, see p. 47.

_ (subscripting)

Make selection
look
_

See p. 47.
For subscripted text *while typing*, see p. 47.

?

Make character or paragraph selection
look
?

With a character selection, information regarding the font and character look will be displayed in the system window. With a paragraph selection, information regarding margins, tabs, x and y settings, vertical tabs if any, etc. will be displayed in the system window.

? character, see p. 49.
? paragraph, see p. 55.

; (document profile property)

Select the entire document profile
look
;

To remove the document profile property:

Make selection
look
:

See p. 79.