above the top of the average TV screen, and the last one or two lines would probably be below the bottom of the screen. Thus, there would be no border at the top or bottom. The standard mode 0 display list has 27 commands. The first three are the same and each specifies eight blank screen lines. The last 24 specify 24 mode 0 display lines.

Now let's consider a mixed mode display. You might start with the first three commands the same as the standard mode 0 display (each specifying 8 blank lines). Next, you might have 12 commands specifying mode 0 and then 12 specifying mode 1. This will give a display with the top half mode 0 and the bottom half mode 1. To design such a display, you need to specify the custom graphics mode 256. Next, the program asks what graphics mode you want for each display line, starting with zero, the first line. The possibilities are 0 to 15 or B for blank. In this case, you want screen line 0 to be blank, so type B. Next it asks how many blank screen lines. You type 24. Because one display list command can produce from one to eight blank screen lines, the program sets up the first three commands to each produce eight blank screen lines.

Next, the program says you are on screen line 24, and asks what mode you want to use for the third display line. You type zero. Then the program says that each mode 0 display line uses eight screen lines. Next it asks how many mode 0 lines it should set up. You want 12, so type 12. The program says that you are on screen line 120 and asks what mode you want to use for display line 15. You want mode 1, so you type 1. The program says that each mode 1 line uses eight screen lines and asks how many mode 1 lines it should set up. You type 12. Next, the program says that you are on screen line 216 and asks what mode you want for the display line 27. You are now done and can type D. This ends the display list and sends you to the display you have just set up so you can begin working on it.

When the program asks for the mode number, there are several options available to you in addition to those already mentioned. Here is a description of these options:

U---stands for undo. If you make a mistake in specifying the mode number or the number of display lines in the previous entry, typing U removes the entry and allows you to redo it. The number of times you type U determines how many entries are removed.

E---stands for erase, and allows you to start over at display line 0.

LIST---lists information about the display list commands you have entered.

LLIST---same as LIST, except output is to the printer.

DLIST---gives detailed information for the display list you are working on, including the memory location of each display list command and the memory location of the data for that command. In addition, for scrolling modes it gives the maximum amount you can scroll in the horizontal and vertical directions, as well as the maximum row and column numbers which can be used in the special plot to scrolling display subroutines (see Section 6, p.8).

DLLIST---same as DLIST, except output is to the printer.