We come now to the scoring routines, which don't need to be covered here. The VIP manual covers the process of converting and displaying numbers on the screen, and I haven't done any new things to the routines. The only unusual part is the change of display pages as previously discussed. But notice the use of my timer subroutine again.

Locations 0310-0342 erase the trail from front to back when you run into something other than the target. This is a more complex version of the memory array indexing system used to store the coordinates, but it works basically the same way. In reverse. Three possible trail conditions must be tested:

- 1) Trail not at maximum length
- 2) Trail over maximum length
- 3) Trail just reached maximum length

At each, the memory pointer must be treated specifically to point to the right information and erase no more than the number of bips on the screen. Since the array is circular, the index must be carefully controlled.

Modifications And Helpful Hints

Locations 0352-0358 test for a win, and can be altered to allow higher or lower end-game scores.

The initial trail speed is set by the value in the data array at 03F5. This can be switched to any even number for a new starting trail speed. Since the trail speed is increased by a factor of two, even numbers are necessary here.

The VIP manual makes the statement that 02 is the smallest values that the speaker will respond to, and that sounding the tone for a unit of 01 will not work. I have found this to be untrue, and prefer the shorter "beep". You should hear a beep every time the trail moves, and a fast sequence of seven beeps when a target is hit. If you don't, try changing 02FD and 025D from 01 to 02 for a slightly longer beep.