than a yardstick measurement of its length. Only by correctly evaluating the strength of a certain game board position, and only by outsmarting its opponent will the computer play the programmer's dream of an unbeatable game. VIP-FLOP is beatable, and I do not say this in despair. Unlike most games on the market, I'll show you how you can try your hand at improving the computer's strategy by writing your own board evaluation routine. For this you will need to understand how the computer performs its look-ahead, and I will devote the rest of this chapter to the process. Even if you do not write your own evaluation, I will show you some simple modifications which may be made to test the computer's playing ability while learning how decisions are made in a game of this type. Certain features have been built in to VIP-FLOP to allow (and I hope encourage) experimenting. Each produces measurable differences in the computer's ability to find the best move.

First, however, please look at the Version Controllers, the routines that control the three possible modes of play, beginning at 035C. VIP-FLOP is subroutine driven to such an extent that the Version Controllers took only 20 minutes to write, debug and test. Rather than write one long routine which jumps around differently depending on