As some of the routines used by Space Wars are discussed in an earlier program (See "Surround"), they are not detailed again here. However, the sections affected are indicated in case you want to look them up.

Space Wars contains many features that could be useful for a variety of games, and you are encouraged to "tinker" with the program to discover how it works. I will try to concentrate on some of the more interesting details here.

The main program loop exists at locations 0300-038C. Actually, the first part simply sets the stage, draws the phaser sights, and calls the subroutines to do the work. The action begins at location 0332. The remainder of the program consists only of subroutine modules which are called by the main loop. Some of the subroutines call others, of course - a technique known as "nesting". Twelve levels of nesting are available with CHIP-8 - which means you could have twelve subroutines, each of which is called by a previous one before control is returned to the main program. Such depth is probably very rare, and is usually not necessary.

I strongly recommend this "modular" form of programming, by the way. The idea is to write down all the functions your program will require, concentrating on what each section is to do, rather than on how you will program it to perform. For instance, in Star Wars, a partial list includes such things as: Fire Phasers, Display A Target; Return Fire; etc. These function names later became the titles for the subroutines as each routine was programmed and debugged.

The next step is to write the main loop, or executive routine. This routine initializes everything of importance and calls the subroutines in their proper sequence. This loop should be capable of functioning without any of the subroutines it will eventually call (as each subroutine should be able to function alone to perform its function). Then, as each routine is written, it can be tested and debugged without