INTRODUCTION

As Editor of the VIPER, the newsletter for owners of the RCA
COSMAC VIP, I have been constantly surprised and pleased at
the ingenuity and creativity displayed by VIP owners. The
VIP was originally designed to allow its owners to create
programs utilizing the excellent video display capabilities
of the 1802 microprocessor, coupled with the 1861 video dis-
play generator. This simple yet elegant combination has pro-
vided hundreds of hours of fun and education for thousands
of VIP purchasers. The excellent set of games and displays
available in the VIP Instruction Manual provided the spring-
board for dozens of programs we have published in the VIPER.

Although the VIP was never intended to display more than a
few alphabetic characters (mostly messages incidental to some
game program), there has been a continuing interest on the
part of VIP users in displaying text on the VIP. A first
step in this direction was the publication in an early is-
sue of the VIPER of a higher resolution interrupt subroutine,
permitting twice as many lines of text on a single screen.
Later articles doubled this resolution again, and this is
the display format used in several of the programs in this
volume. This resolution, 128 vertical elements by 64 hori-
zontal elements, allows up to sixteen lines of sixteen char-
acters each.

In part, this book is an exploration of the text capabilities
of the VIP. The Character Designer program, coupled with the
Messager routines, allows easy display of text messages under
CHIP-8 control, while giving the programmer a virtually unlim-
ited capability to design his own character sets. These capa-
bilities are elegantly displayed in the Text Editor 21 and the
Disassembler 7 programs, which give the VIP capabilities its
designers probably never imagined. In addition, Tom has given
us two entertainment programs: Surround and Space Wars. They
are among the best games ever designed for the VIP. And the