COMMAND PARAMETERS (CONTINUED)

<symbol> — A name corresponding to an address or a record definition. A symbol name is always preceded by @.

<test> — Used to compare two values. The possible tests are LT (less than), LE (less than or equal), EQ (equal), NE (not equal), GE (greater than or equal), and GT (greater than).

PERISCOPE INSTALLATION OPTIONS

/A — Use an alternate debug screen. This option indicates that you have both a monochrome and a color monitor attached to the system via separate display adapters.

/D — Restore the original INT 13H vector for a short boot.

/H — Install the on-line help into normal RAM.

/M:nnnn — Set the protected memory segment to something other than C000H. The four-digit hex number nnnn represents the segment to be used.

/P:nnnn — Set the protected memory ports to something other than 300H and 301H. The one to four-digit hex number nnnn represents the lower of the two ports to be used.

/R:nn — Set the size of the record definition table to something other than 1K. The one or two-digit hex number nn is the number of K desired, from 1K to 32K.

/S:nn — Set the size of the original or saved screen buffer to something other than 4K. This option is used when debugging programs that use the color-graphics adapter. The one or two-digit hex number nn is the number of K desired, from 4K to 32K.

/T:nn — Set the size of the symbol table to something other than 1K. The one or two-digit hex number nn is the number of K desired, from 1K to 63K.

/V:nn — Indicate a BIOS interrupt vector that is to be left alone while PERISCOPE is active. The possible interrupts are 9, 10H, 16H, 17H, and 1CH.

KEYBOARD USAGE

Ctrl-Break — cancels the current command and returns to the debug prompt.

Ctrl-PrtSc — toggles printer echo of screen output on and off (same as DOS).

Ctrl-S — suspend output until another key is pressed. This key combination is used to keep information from scrolling off the screen too quickly.

Del — deletes a character from the previous command line (same as DOS).

Esc — cancel the current command line (same as DOS).

F1 — copy one character from the previous command line into the current command line (same as DOS).

F3 — copy the remainder of the previous command line into the current command line. This key copies up to, but not including the carriage return (same as DOS).

F4 — same as F3, except that a carriage return is added at the end of the command line. For repetitive commands, you can use just one keystroke — F4.

F7 — display the current record definitions as read from a DEF file when RUN is started. This key is ignored unless the cursor is at the beginning of a command line.

F8 — display the address and name of the symbol table entries as read from a MAP file when RUN is started. This key is ignored unless the cursor is at the beginning of a command line.

F10 — switches from the debug screen to the original screen if only one monitor is being used. If two monitors are used and the /A option was used to start PERISCOPE, this key has no effect. To return to the debugger screen from the original screen, press any key.

Ins — places the current command line into insert mode (same as DOS).

Semi-colon — This character is used as a pseudo carriage-return. Using it, you can enter multiple commands on one line.

Shift-PrtSc — prints the entire screen to the parallel printer (same as DOS).

Periscope

Quick-Reference Card

PERISCOPE COMMAND / FUNCTION

PERISCOPE COMMAND	FUNCTION
? [<function><sub-function>]	Help
BA '?' or '*'	Display/clear all breakpoints
BB '?' or '*' or <address> <test> <byte> [...]	Display/clear/set byte breakpoints
BC '?' or '*' or <address> [...]	Display/clear/set code breakpoints
BM '?' or '*' or <address> <address> 'R' and/or 'W' [...]	Display/clear/set memory breakpoints
BR '?' or '*' or <register> <test> <number> [...]	Display/clear/set register breakpoints
BW '?' or '*' or <address> <test> <number> [...]	Display/clear/set word breakpoints
C <range> <address>	Compare memory
D [<range>]	Display memory in byte format
DB [<range>]	Display memory in byte format
DD [<range>]	Display memory in double word format
DR <address> <symbol>	Display memory using a record format
DW [<range>]	Display memory in word format
E <address> [<list>]	Enter changes to memory
ES <address> <symbol>	Enter symbol definition
F <range> <list>	Fill memory with a byte/string pattern
G [<address>] [...]	Go until code breakpoint reached
GB [<address>] [...]	Go until code/monitor breakpoint reached
GT [<address>] [...]	Go until code/monitor breakpoint reached
H <number> <arithmetic operator> <number>	Hex arithmetic
I <port>	Read I/O port
J	Jump to next instruction
K	Clear debug screen
LA <address> <drive> <sectors>	Load absolute sectors from disk
LF [<address>]	Load file from disk
M <range> <address>	Move (copy) a block of memory
N <name>	Format PSP for disk I/O
O <port> <byte>	Write I/O port
Q [<sub-function>]	Quit PERISCOPE
R [<register>] or [F]	Display or change registers
S <range> <list>	Search memory for a byte/string pattern
SA <range> <address>	Search for address references
T [<number>]	Trace execution
U [<range>]	Unassemble memory
WA <address> <drive> <sectors>	Write absolute sectors to disk
WF [<address>]	Write file to disk
X <number>	Translate hex number
XA <address>	Translate address
XD <decimal number>	Translate decimal number
XH <number>	Translate hex number
/S	Change segment in symbol table

COMMAND PARAMETERS

<address> — The address of a memory location. It is composed of a segment and an offset, separated by a colon. A symbol can be used instead of an address.

<arithmetic operator> — The symbols +, -, *, and /.

<byte> — A one or two digit hex number from 0 to FF.

<decimal number> — A decimal number from 0 to 65,535.

<drive> — A single-digit number corresponding to a disk drive, where 0 is drive A, 1 is drive B, etc.

<flag> — A flag register. See the manual for the possible mnemonics.

<function> — The debugger command, such as U.

<length> — The number of bytes affected by a command. It may be represented by a number following an address or L nnnn where nnnn is a hex number from 1 to FFFF.

<list> — A list of byte(s) and/or string(s).

<name> — A string of characters that are copied as entered to the unformatted parameter area in the PSP.

<number> — A one to four digit hex number or register.

<offset> — The one to four digit hex number or register representing the offset into the specified segment.

<port> — The one to four digit hex number associated with an I/O port.

<range> — An address and a length.

<register> — A machine register. The possible registers are AX, BX, CX, DX, SP, BP, SI, DI, DS, ES, SS, CS, and IP.

<sectors> — Two hex numbers representing the starting relative sector number and the total number of sectors (max 80H).

— A one to four digit hex number or register representing one of the four segment registers.

<string> — A quoted list of ASCII characters. Single or double quotes may be used to delimit the string.

<sub-function> — The mnemonic used with some commands.