I	Print break information for last breakpoint.
K	Print stack pointer from breakpoint.
L	Load memory from cassette.
MNNNN=MMMM,LLLL	Move memory block "MMMM" to "LLLL"-1 to location "NNNN" and up in memory.
NHEX)NNNN,MMMM	Search for string of bytes "HEX" (1-4) between memory location "NNNN" and "MMMM"-1.
O	Print overflow/remainder from hex calculator.
P	Print processor status word from breakpoint.
QNNNN	Disassemble 23 lines from location "NNNN". A linefeed continues disassembly for 23 more.
RMMMM=NNNN,LLLL	Relocate "NNNN" to "LLLL"-1 to location "MMMM"
SMMMM,NNNN	Save memory block, "MMMM" to "NNNN"-1 on cassette.
T	Print breakpoint table.
V	View contents of cassette.
WTEXT)MMMM,NNNN	Search for ASCII string "TEXT" between "MMMM" and "NNNN"-1
X	Print X index register from last break.
Y	Print Y index register from last break.

NOTE: All commands are line buffered by OS-65D. Thus only 18 characters per line are allowed and CONTROL-U and BACKARROW apply.

Source File Format

Relative Disk Address	Memory Address	Usage
Ø	$3279	Source start (low)
1	$327A	Source start (high)
2	$327B	Source end (low)
3	$327C	Source end (high)
4	$327D	Number of tracks req.
5 and on ...	$327E and on..	Source text

Directory Format

Two sectors (1 and 2) on track 12 hold the directory information. Each entry requires 8 bytes. Thus there are a total of 64 entries between the two sectors. The entries are formatted as follows:

Ø - 5	ASCII 6 character name of file
6	BCD first track of file
7	BCD last track of file (included in file).

Track Formatting

The remaining tracks are formatted as follows:

- 1Ø millisecond delay after the index hole
- a 2 byte track start code, $43 $57
- BCD track number
- a track type code, always a $58

There can be any mixture of various length sectors hereafter. The total page count cannot exceed 8 pages if more than one sector is on any given track.

Each sector is written in the following format:

- previous sector length (4 if none before) times 8ØØ microseconds of delay
- sector start code, $76
- sector number in binary
- sector length in binary
- sector data

Diskette Copier

The diskette copy utility is found on track 1 sector 2. It should be loaded into location 2ØØ with a "CA Ø2ØØ=13,1. To start it type, "GØ 02ØØ". To select the copier type a "1". The

copier automatically formats the destination diskette before writing on it.

Track Ø Read/Write Utility

This utility permits the reading of data on track Ø anywhere into memory. Also the capability is available to write any block of memory to track Ø specifying a load address and page count. The track zero format is as follows:

- 10 millisecond delay after the index hole
- the load address of the track in high-low form
- the page count of how much data is on track zero

End User POKEs to BASIC

Location	Old	New	Function
2972	58	13	Disable , and : terminators on string input
2976	44	13	
2Ø73	173	96	Ignore CONTROL-C
2893	55	28	Disable break on null input.
2894	Ø8	11	"REDO FROM START"
741	76	1Ø	Remove keywords, "NEW" and "LIST"
75Ø	78	1Ø	

Other POKEs to BASIC

Location	Function
23	Terminal width
2888,8722	If both are Ø a null input to a "INPUT" statement yields an empty string or a Ø. If both are 27 then the input statement functions are normal.
8917	USR(X) Disk Operation Code: Ø - write to Drive A 3 - read from Drive A 6 - write to Drive B 9 - read from Drive B

9826	Track number for USR(X) Disk Operation
9822	Sector number for USR(X) Disk Operation
9823	Page count for USR(X) disk write, or number of pages read in by disk read
9824	Low byte of address of memory block for USR(X) Disk Operation
9825	High byte of address of memory block for USR(X) Disk Operation
8954	Location of JSR to a USR function. Preset to JSR $22D4, i.e., set up for USR(X) Disk Operation
8993	I/O Distributor INPUT flag
8994	I/O Distributor OUTPUT flag
8995	Index to current ACIA on 55Ø board. If numbered from Ø to 15 the value POKEd here is 2 times the ACIA number.
8996	Location of a random number seed. This location is constantly incremented during keyboard polling.
896Ø	Has page number of highest RAM location found on OS-65D's cold start boot in. This is the default high memory address for the assembler and BASIC
9Ø98	Low byte address for memory input
9Ø99	High byte address for memory input
91Ø5	Low byte address for memory output
91Ø6	High byte address for memory output
9132	Low byte address for memory buffered disk input
9133	High byte address for memory buffered disk input Bit 5 device. Defaults to $327E
9155	Low byte address for memory buffered disk output
9156	High byte address for memory buffered disk output Bit 5 device. Defaults to $327E.
9213	Low byte address for memory buffered disk input
9214	High byte address for memory buffered disk input Bit 6 device. Defaults to $3A7E.
9238	Low byte address for memory buffered disk output

9239

High byte address for memory buffered disk output. Bit 6 Device. Defaults to $3A7E.

8998

Memory buffered disk I/O Bit 5 Device Parameters:

8998-8999 - Buffer start address ($327E)
9000-9001 - Buffer end address ($3A7E)
9002 - First track of file
9003 - Last track of file
9004 - Current track in buffer
9005 - Dirty buffer flag (0=clean)

9006

Memory buffered disk I/O bit 6 Device Parameters:

9006-9007 - Buffer start address ($3A7E)
9008-9009 - Buffer end address ($427E)
9010 - First track of file
9011 - Last track of file
9012 - Current track in buffer
9013 - Dirty buffer flag (0=clean)

12042

Location of the 24 used by the random access file calculation routines. This location should only be altered after the open has occurred for the random access file because the PUT GET code is loaded into the directory buffer. This is where this 24 resides. Making it a 48 gives one 64 byte records.

9368

High byte address for indirect file input (low=00)

9554

High byte address for indirect file output (low=00)