OHIO SCIENTIFIC, INC.

TECH NEWSLETTER NUMBER FOUR

5/79

QUESTIONAIRE:

1. Do you wish to see the newsletter continue, even at the cost of Rick Whitesel not being as "available" on the phone?

2. Have the newsletters to date proven useful?

3. Would you like to see more information on: (in order of preference)

____ A) Trouble shooting

____ B) Theory of operation
___ Hardware

___ Software

____ C) Software fixes

____ D) Software routines (entry points, etc.)

____ E) Other

4. Comments: ____

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Company Name: ______________________________

Name: ______________________________

Date: ______________________________

CHANGE TO PREVENT NULLS BEING OUTPUT TO DATA FILES
OS-65U ALL VERSIONS 1.1

SEVERAL PEOPLE HAVE MADE THE STATEMENT THAT THEY HAVE SEEN INSTANCES OF NULLS BEING OUTPUT TO DATA FILES. WE FEEL THAT THOUGH THIS IS POSSIBLE, AND THE CHANGE TO TRAP NULLS IS LISTED BELOW, IT IS MORE LIKELY THAT THE MONEY MODE OUTPUT COMMAND IS NOT BEING USED PROPERLY. THE MONEY MODE OUTPUT ROUTINE WORKS SOMETHING LIKE THIS:

BASIC SEES EITHER A $R OR $L COMMAND

A FLAG IS SET TO INDICATE THE MONEY MODE
THE NUMBER IS FORMATED FOR THE MONEY MODE (2 FRACTIONAL DIGIT)
A NUMERIC TO STRING CONVERSION IS PERFORMED
SPACES ARE ADDED TO THE LEFT OR RIGHT SIDE AS NEEDED
WHEN A NUMERIC VARIABLE IS PRINTED THE MONEY MODE FLAG
IS RESET.

HERE IN IS WHERE THE PROBLEM LIES. IF A MONEY MODE PRINT IS MADE WITH A STRING VARIABLE, THE 'MONEY MODE ON' FLAG IS NOT CLEARED. THEREFORE THE NEXT NUMERIC VARIABLE PRINTED (BE IT TO THE SCREEN, PRINTER OR A FILE), WILL BE PRINTED IN THE MONEY MODE. THIS THEN COULD CAUSE EXTRA SPACES TO BE ADDED TO THE RIGHT OR LEFT SIDE OF THE NUMBER. SINCE BASIC THROWS AWAY LEADING SPACES, A FILE INPUT WOULD USUALLY TOSS THE LEADING SPACES AWAY. HOWEVER, THE NUMERIC VARIABLE WOULD NOT BE PRINTED AT THE ANTICIPATED INDEX. ALSO IF THE SPACES WERE APPENDED TO THE RIGHT SIDE OF THE NUMBER, THESE SPACES WOULD NOT BE THROWN AWAY BY BASIC. THE CHANGE BELOW WILL PREVENT ANY CHARACTERS BELOW A CARRIAGE RETURN (LOWER IN THE ASCII CHART) FROM BEING OUTPUT TO A DATA FILE.

OS-65U ALL VERSIONS 1.1
FIX TO TRAP NULLS ON OUTPUT TO A DATA FILE

```
OK
RUN "CHANGE","PASS

DISK CHANGE UTILITY

MODE: HEX(H), DEC(D) ? H
UNIT ? A
ADDRESS OFFSET ? CØØ
ADDRESS ? 282F
ØØØØ282F  ØA ? ØD
ØØØØ283Ø  FØ ? 9Ø
ØØØØ2831( 28 ? X

OK
CLOSE

OK
```

OS-65U V1.1 LEVEL I
POKES TO LIMIT THE SEARCH RANGE OF THE 'FIND' COMMAND

MANY PEOPLE HAVE REQUESTED A METHOD FOR LIMITING THE 'FIND' COMMAND. BELOW PLEASE FIND A PROGRAMMING EXAMPLE. NOTE THAT THESE POKES ACTUALLY MODIFY THE FILE CONTROL BLOCK AND CARE MUST BE TAKEN IN USING THEM. A CLOSE FOLLOWED BY A OPEN STATEMENT WILL RESTORE THE FILE LENGTH IN THE CONTROL BLOCK. THERE DOES EXIST A DANGER OF TRYING TO WRITE OR READ BEYOND THE POKED END OF FILE. SO ONE REALLY SHOULD RESTORE THE CONTROL BLOCK.

```
1000  REM DECLARE FILE PARAMETERS
1010  CH=1: REM CHANNEL NUMBER
1020  A$="THIS IS A TEST": EODF(CH)=2000: T=EODF(CH)
1030  GOSUB 10000: EODF(CH)=T: REM GOSUB FOR FIND, RESTORE EODF(CH)
1040  IF INDEX(CH)>=EODF(CH) THEN PRINT "NOT FOUND"
1050  IF INDEX(CH)<EODF (CH) THEN PRINT "FOUND"
1060  END


10000 REM CALCULATE OFFSET INTO CONTROL BLOCK
10010 REM CB=9902+CHANNEL NUMBER * 8
10020 CB=9902+CH*8
10030 REM SAV TRUE FILE LENGTH
10040 FOR X=CB TO CB+2: FL(X-CB)=PEEK(X): NEXT
10050 REM MUST ROUND NEW FILE LENGTH UP TO A PAGE BOUNDARY
10060 REM CB=*256, CB+1=*65536, CB+2=*16777216
10070 EODF(CH)=INT((EODF(CH)+255)/256)*256
10080 LH=INT(EODF(CH)/16777216)
10090 RM=EODF(CH)-LH*16777216
10100 LM=INT(RM/65536)
10110 RM=RM-LM*65536
10120 LL=INT(RM/256)
10130 REM POKE NEW EODF INTO FILE CONTROL BLOCK
10140 POKE CB,LL: POKE CB+1,LM: POKE CB+2,LH
10150 FIND A$,CH
10160 REM RESTORE TRUE FILE LENGTH
10170 FOR X=CB TO CB+2: POKE X,FL(X-CB): NEXT
10180 RETURN
```

OS-65D V3.0 through V3.1
FIX TO PERMIT CORRECT OUTPUT TO CA-10X
BOARD (550 BOARD)

```
BASIC EXECUTIVE FOR OS-65D VERSION 3.0

13 OCT 1978 RELEASE

FUNCTIONS AVAILABLE:
  CHANGE - ALTER WORKSPACE LIMITS
  DIR    - PRINT DIRECTORY
  UNLOCK - UNLOCK SYSTEM FROM END USER MODIFICATIONS

FUNCTION? UNLOCK

SYSTEM OPEN

OK
EXIT
Ø1 TRACK
A*EM



 :!CALL Ø2ØØ=Ø1,2   For Mini Floppy System  :!CALL Ø2ØØ=13,1

 :! GO Ø2ØØ


 - DISKETTE UTILITIES -

 SELECT ONE:
 1) COPIER
 2) TRACK Ø READ/WRITE
 ? 2


 - TRACK ZERO READ/WRITE UTILITY -

 COMMANDS:
 RNNN - READ INTO LOCATION NNNN
 WNNNN/GGGG,P - WRITE FROM NNNN FOR P PAGES
                WITH GGGG AS THE LOAD VECTOR
 E - EXIT TO OS-65D

 COMMAND? R42ØØ


 - TRACK ZERO READ/WRITE UTILITY -

 COMMANDS:
 RNNNN - READ INTO LOCATION NNNN
 WNNNN/GGGG,P - WRITE FROM NNNN FOR P PAGES
                WITH GGGG AS THE LOAD VECTOR
 E - EXIT TO OS-65D

 COMMAND? E
```

```
A*RE EM


:@44BA

44BA/4F 4D
:EXIT


A*GO Ø2ØØ


- DISKETTE UTILITIES -

SELECT ONE:
1) COPIER
2) TRACK Ø READ/WRITE
? 2


- TRACK ZERO READ/WRITE UTILITY -

COMMANDS
RNNNN - READ INTO LOCATION NNNN
WNNNN/GGGG,P - WRITE FROM NNNN FOR P PAGES
               WITH GGGG AS THE LOAD VECTOR
E - EXIT TO OS-65D

COMMAND? W42ØØ/22ØØ,8


- TRACK ZERO READ/WRITE UTILITY -

COMMANDS:
RNNNN - READ INTO LOCATION NNNN
WNNNN/GGGG,P - WRITE FROM NNNN FOR P PAGES
               WITH GGGG AS THE LOAD VECTOR
E - EXIT TO OS-65D

COMMAND? E


A*BASIC

OSI 9 DIGIT BASIC
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 36481 BYTES FREE


OK
RUN"BEXEC*
```

DISK OS-65D V3.1 8" Floppy
DIRECTORY

PAGE 1
DATE 5/79

#1	#2	#3	#4	#5	#6	#7
Program	Track	Sector or Format	Start of Transfer	Length in Pages	Go Address	Comments
OS-65D V3.1 Part I	0	----	$2200	8	$2200	
" " Part II	1	1	$2A00	5		WARM START @$2A51
COPIER/TRACK Ø R/W'R	1	2	$0200	5	$0200	
9 digit BASIC Part I	2	1	$0200	B	$21E4	Modified 9-digit microsoft BASIC
" " II	3	1	$0D00	B		
" " III	4	1	$1800	B		
ASSEMBLER/EDITOR Part I	5	1	$0200	B	$1300	
" " II	6	1	$0D00	A		
Extended Monitor V2.0	7	1	$1700	9	$1700	
Directory Page 1	8	1	$2E79	1		Part I
" " 2	8	2	$2E79	1		" II
BASIC OVERLAY	8	3	$20C4	1		
GET/PUT OVERLAY for BASIC	8	4	$2E79	1		LOADS INTO DIRECTORY SPACE
UTILITIES	9	Load/Put				
	10					
	11					
	12					
	13					
	14					
	15					
	16					
	17					
	18					
	19					
1st Free Track	20					