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Hello again. Some have called asking why their newsletter stopped coming. Well, your newsletter didn't stop. Everyone's did. We are sorry for the delay but things have been hopping.

NEW PRODUCTS

1. COPY-WRITER: One of the things needed by PEDISK II owners is a professional word processor. Its here! Copy-Writer was developed by IDPC CO. It offers all the good stuff- margins, spacing, footers, headers, tabs, paging, centering and shorthand. On top of all that its got stuff not even found in brand 4+ - double column printing, sends hex codes to printer, and graphics control. Its pretty nice to use. We have switched over to Copy-Writer on all machines now and have found it is saving a lot of time. It runs very fast (not written in BASIC) but does seem to take a bit of time on disk access. We understand that text data is compressed sector by sector as it is stored on disk. This saves a lot of disk space but does slow loading and storing a bit. All in all it is thrilling.

Copy-Writer is available at \$185.00 from your dealer. By the way, it is also available for your friends who happen to have Commodore 4040, 8050 disks and Apple users.

2. FILEX is a new program developed by Wilserve to allow 8' PEDISK owners to exchange data records with IBM compatible machines. FILEX actually reads the IBM generated directory recorded in 'Basic Data Exchange' format. Actual character string records are read into a BASIC variable. FILEX also writes records on a disk and can generate an IBM compatible directory. It does all the work and even converts EBCDIC to ASCII on a read and vice versa on a write.

There are some really neat applications for this. A Commodore/PEDISK can be used as a key-to-disk machine doing the work of an IBM 3741 machine. Guess which is many times cheaper. Data can be processed at a Commodore and sent via disk to a central computer for accumulation and further processing. One customer even recorded print files to disk and later printed the data on his high speed IBM printer.

FILEX is a ROM that resides at \$A000. It supplies six routines: initialize, open input file, open output file, read a record, write a record, and close file. These can be integrated into accounting programs, data entry programs, or whatever. Sample programs are listed. FILEX is available for \$245.00 from your dealer.

3.DISK UTILITY is a new set of useful and neat things to assist the PEDISK owner. Written by John O'Hare, a menu of disk functions appears. These include a disk logger, block map, change diskname, restore 'killed' files, print directory, compact a program, and cross reference.

The disk logger reads directories from many disks. It stores and correlates disk names and the directories. Disk names, file names, etc. can be listed and printed. The complete catalog can be printed or recorded to disk. The block map shows the complete usage of a disk in terms of system files, BASIC files, open area, etc. Disk names can also be changed. 'Killed' files can be restored (if not compressed) and the disk utility will print a specially formatted directory. DISK UTILITY has proven to be a valuable tool. It is now available from your dealer. The cost is \$25.00.

4.UNASSEMBLER - What is unassembler? Well, it takes machine language code and actually writes a MAE compatible source file on a PEDISK diskette. This program was originally written by Bob Seylar of Commodore. It was converted to MAE by Jim Strasma. It was then converted for PEDISK by Gary Tolton. Unassembler works great! The user does have to separate the machine code from ASCII text and tell the program which is which. The program then reads the code and actually records a MAE source file on disk complete with labels. This has been extremely valuable in converting some other programs from Commodore 4040 to PEDISK. It has also been extremely valuable in creating special mods to some of my ROMs. Purely public domain, Microtech offers this for the cost of copying. For now, send \$6.00 or a good formatted PEDISK diskette and a SASE.

5.Chuck Johnson has converted VISICALC to PEDISK! We have purchased a copy of VISICALC and verified it. VISICALC/PEDISK may be purchased from Microtech or your Microtech dealer. The cost is \$200.00.

NEWS

Chuck Johnson has written a new data base manager for PEDISK. Named FASTFILE, it is! It is not quite finished yet so pay attention, news will be coming.

AUTO LOADING

One of the biggest things that keeps the non-experts from using computers is the complicated procedures required - Syntax, etc. Look at PEDISK:

1. Turn on machines
2. Insert disk and type SYS59904
3. PEDISK message appears - now type !run'prog:0'

Everytime I explain the procedures to friends or family my computer demonstration loses a little of its thunder because the person at the keyboard always screws up. This can be solved! The BASIC ROM can be modified to automatically initialize the PDOS and even automatically load and run a program called 'M:0'. The situation is now totally different. When the computer is turned on, PDOS is automatically loaded and a menu program is also loaded and executed. Flick the power on and a freindly menu appears on the screen - pick your program. At last - friends and family are impressed, my kids are using the educational software, and my secretary can use the computer by herself.

Here's how to do it:

If the Basic 4.0 \$D000 ROM is soldered in, unsolder it, and install a socket. Modify the ROM as shown below. If you don't have a prom burner, go see a friend.

The patch program is:

PATCH	JSR NEW	D42A 20 D4 B5
	LDA \$EA00 PDOS?	D42D AD 00 EA
	CMP#\$4C	D430 C9 4C
	BNE P1 NO PDOS!	D432 D0 13
	JSR \$EA00 INIT PDOS	D434 20 00 EA
	LDX #\$0A	D437 A2 0A
P0	LDA \$DEB4,X MOVE STRING	D439 BD B4 DE
	STA \$0200,X	D43C 9D 00 02
	DEX	D43F CA
	BPL \$D439 (P0)	D440 10 F7
	LDY #01	D442 A0 01
	JMP \$B409	D444 4C 09 B4
P1	LDA \$34	D447 A5 34
	SEC	D449 38
	SBC \$28	D44A E5 28
	TAX	D44C AA
	LDA \$35	D44D A5 35
	SBC \$29	D44F E5 29
	JSR \$CFB3	D451 20 B3 CF
	LDA #\$A4	D454 A9 A4
	LDY #\$DE	DA56 A0 DE
	JSR \$BB1D	D458 20 1D BB
	JMP \$B3FF	D45B 4C FF B3

Two strings must also be installed starting at \$DEA4.

The exact patch byte for byte is:

						STRINGS	
	OLD	NEW		OLD	NEW	OLD	NEW
D42A	A9	20	D445	20	09	DEA4	2A
D42B	A4	D4	D446	D4	B4	DEA5	2A
D42C	A0	B5	D447	B5	A5	DEA6	2A
D42D	DE	AD	D448	4C	34	DEA7	20
D42E	20	00	D449	FF	38	DEA8	42
D42F	1D	EA	D44A	B3	E5	DEA9	49
D430	BB	C9	D44B	20	28	DEAA	4C
D431	A5	4C	D44C	42	AA	DEAB	4C
D432	34	D0	D44D	59	A5	DEAC	2C
D433	38	13	D44E	54	35	DEAD	53
D434	E5	20	D44F	45	65	DEAE	20
D435	28	00	D450	53	29	DEAF	42
D436	AA	EA	D451	20	20	DEB0	41
D437	A5	A2	D452	46	83	DEB1	53
D438	35	0A	D453	52	CF	DEB2	49
D439	E5	BD	D454	45	A9	DEB3	43
D43A	29	B4	D455	45	A4	DEB4	20
D43B	20	DE	D456	0D	A0	DEB5	20
D43C	83	9D	D457	00	DE	DEB6	20
D43D	CF	00	D458	23	20	DEB7	20
D43E	A9	02	D459	23	1D	DEB8	20
D43F	4B	CA	D45A	23	BB	DEB9	20
D440	A0	10	D45B	20	4C	DEBA	20
D441	D4	F7	D45C	43	FF	DEBB	20
D442	20	A0	D45D	4F	B3	DEBC	20
D443	1D	01				DEBD	20
D444	BB	4C				DEBE	20
						DEBF	0D

The patch is shown for Basic 4.0. For those of you with 3.0 here is the equivalent address so that you can work out a similar patch. The area from \$E196 thru \$E1DD can be used. The 'BYTES FREE' string must be made smaller.

\$D42A(4.0)=\$E196(3.0)

The suggested procedure is:

1. Turn on disk drive
2. Put in diskette and close door
3. Turn on PET -- DA DA!

If the PDOS ROM is not present, the program prints bytes free and normally goes to BASIC. If the program 'M:0' is not on disk, question marks are printed and the program goes normally to BASIC.

Rename a favorite program 'M:0' and try it out; Remember, it is essential that a copy of the operating system software file '*****', be on the disk; Have fun!

PROGRAMMING TIPS

Lou Sander has written a 'menu builder' for PEDISK. Give it a try.

MENU MAKER FOR PEDISK II

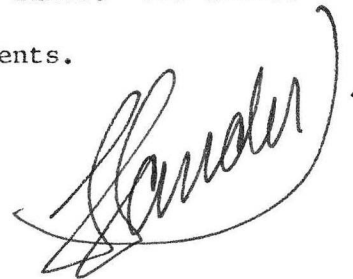
The accompanying program creates a very useful menu of BASIC programs on any PEDISK II diskette. The program includes complete instructions, but these additional notes will be helpful in getting the most out of it. If you enter the program from the listing, pay special attention to lines 1220, 1230, 1240, 1540, and 1560. The blank characters enclosed in quotes there MUST be SHIFTED SPACES; they allow RETURN to be hit in response to INPUT statements.

When you run the program, it will show you every active file on the diskette, but will ask you to enter names only for BASIC program files. If you want a program to be left out of your menu, just hit RETURN instead of entering a name. After MENU MAKER steps you through every file on the diskette, it opens a temporary disk file, sorts your program names alphabetically, and creates some DATA statements by PRINTing them and POKEing RETURNS into the keyboard buffer. Finally, it kills the temporary file. All this makes for some unusual screen activity, but don't worry -- the action is part of the program.

When you get a READY message, MENU MAKER has been replaced in memory by the menu program itself. You can run it, but don't select any programs until you have !SAVED the menu as "M:Ø". (Selecting a program would, of course, wipe out your menu.) If you made any errors in entering the program names, you can correct them by changing the DATA statements.

Once you have !SAVED the menu program, be careful when making changes, so you don't wipe out your menu by mistake. I always !SAVE the new program as NEW M, then kill M and change the name of NEW M to M.

The techniques used in this program should interest any inquisitive PEDISK user: it includes both BASIC- and PDOS-mode file handling, some unique processing first seen in the BLOCK MAP program from Newsletter #2, the famous "dynamic keyboard", and a newly developed "electric eraser" method for deleting unneeded lines. The author would appreciate your suggestions for improvements.



```

1000 REM ** MENU MAKER FOR PEDISK II ** 1260 FI$(A)=FI$(A)+":0"
1010 REM      LOUIS F. SANDER      1270 !RUNFI$(A)
1020 REM      153 MAYER DRIVE      1280 END
1030 REM      PITTSBURGH, PA 15237 1290 K=0:PRINT"ENTER THE # TO RUN THE
1040 REM                                PROGRAM:"
1050 REM      (412) 366-5414      1300 PRINT" #    PROGRAM NAME"TAB(33)"FI
1060 REM                                LE"
1070 DATA"LAST ONE","ERROR"      1310 PRINT"      "TAB(33)"
1080 DIMDN$(64),FI$(64)            "
1090 FORI=1TO64:READDN$(I),FI$(I):IFDN$ 1320 RETURN
<I>="LAST ONE"THENJ=I-1:I=64      1330 E=PEEK(58)+256*PEEK(59)+3:POKE2,IN
1100 IFDN$(I)="LAST ONE"THEN1360  T(E/256):POKE1,E-256*PEEK(2)
1110 NEXT      1340 IFERTHENPOKEE-2,0:POKEE-1,0:POKE42
1120 GOSUB1290      ,PEEK(1):POKE43,PEEK(2):CLR:END
1130 FORI=1TOJ      1350 REM ** REMAINING LINES SET UP MENU
1140 PRINTITAB(4)DN$(I)TAB(32)FI$(I)" 1360 GOSUB1980:REM ** INSTRUCTIONS
1150 K=K+1:IFK=10THEN1170      1370 PRINT"
1160 NEXT      1380 I=PEEK(53):POKE634,I:POKE53,31:CLR
1170 PRINT" WHICH #";      1390 DIMFI$(64),DN$(64),DS$(64),X$(16)
1180 IFJ=<ITHEN1200      1400 AD=32512:POKEAD+145,1:POKEAD+146,0
1190 PRINTTAB(13)"(HIT RETURN TO SEE  POKEAD+147,1:POKEAD+150,8
MORE)";:PRINT"D":PRINTTAB(8):GOTO1220 1410 POKE183,0:POKE184,32:SYS59910:POKE
1200 IFJ=<10THEN1220      59648,0:B=4096*2
1210 PRINTTAB(13)"(HIT RETURN TO STAR 1420 PRINT"DISK NAME: ";:FORI=8TOB+7:PR
T OVER)";:PRINT"D":PRINTTAB(8)      INTCHR$(PEEK(I));:NEXT:PRINT:B=B+16
1220 INPUT" ";A$      1430 PRINT"    FILE    DESCRIPTIVE"
1230 IFI<JANDLEFT$(A$,1)=" "THEN:K=0:GO 1440 PRINT" #    NAME    NAME"
SUB1290:NEXT      1450 PRINT"      "
1240 IFLEFT$(A$,1)=" "THEN1120      1460 FORI=8TOB+62*16STEP16
1250 A=VAL(A$):IFA=0ORA>JTHEN1120      1470 FORJ=0TO15:X$(J+1)=PEEK(I+J):NEXT

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1480 IFX%(11)=255THENI=B+62*16:GOTO1570
1490 IFX%(6)=255THENPRINT"Q":GOTO1570
1500 PN=PN+1:FI$(PN)=""
1510 FORJ=1TO6:FI$(PN)=FI$(PN)+CHR$(X%(
J)):NEXT
1520 PRINTPNTAB(4)FI$(PN);
1530 IFX%(11)<>3THENPN=PN-1:PRINT"  NO
T A BASIC PROGRAMQ":PRINT"  ":GOTO1570
1540 INPUT"  IIII";DN$(PN)
1550 IFLEN(DN$(PN))>26THENPRINT"DESCRIP
TIVE NAME TOO LONG!Q":GOTO1520
1560 IFDN$(PN)="" THENPN=PN-1:PRINT"Q
"TAB(12)"QBASIC PROGRAM NOT ON MENU"
1570 NEXT
1580 POKE158,0
1590 INPUT"QLAST PROGRAM. READY TO SORT
(Y= OR N=)";A$
1600 IFLEFT$(A$,1)<>"Y"THENEND
1610 J=PEEK(634):POKE53,J
1620 PRINT"QMSORTING YOUR PROGRAMS...Q"
1630 M=PN:N=M:I%=M
1640 M=INT(M/2):IFM=0THEN1770
1650 J=1:K=N-M
1660 I=J
1670 L=I+M
1680 IFDN$(I)<DN$(L)THEN1730
1690 T$=FI$(I):FI$(I)=FI$(L):FI$(L)=T$
1700 T$=DN$(I):DN$(I)=DN$(L):DN$(L)=T$
1710 I=I-M:IFI<1THEN1730
1720 GOTO1670
1730 J=J+1
1740 IFJ>KTHEN1640
1750 GOTO1660
1760 REM ** SET UP DATA STATEMENTS
1770 FORI=1TON:DS$(I)=STR$(10*(I))+ "DAT
A "+DN$(I)+", "+FI$(I):NEXT
1780 !OPEN"T:0"NEWLENI%:IFFC%THENPRINTF
C%:STOP
1790 FORI=1TON: !PRINT"T:0"DS$(I):IFFC%T
HENPRINTFC%:STOP
1800 NEXT
1810 !CLOSE"T:0"END:IFFC%<255THENPRINTF
C%:STOP
1820 !OPEN"T:0":IFFC%THENPRINTFC%:STOP
1830 PRINT"QIII":J=I+7
1840 FORI=1TOJ

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```

1850 IFFC%THEN1880
1860 INPUT "T:0" A$: IFFC%THEN1880
1870 PRINT A$
1880 NEXT
1890 IFFC%=255 THEN PRINT "GOTO1920": GOTO1
910
1900 PRINT "I=" I ": GOTO1830": GOTO1910
1910 PRINT "M": POKE158,9: FOR J=0 TO 9: POKE6
23+J,13: NEXT: END
1920 ICLOSE "T:0": IFFC%>0 AND FFC%<255 THEN P
RINT FFC%: STOP
1930 PRINT "*****! SYSM"
1940 POKE158,8: A$="13758458481382"
1950 FOR I=1 TO 7: A=VAL(MID$(A$,2*I-1,2)):
POKE622+I,A: NEXT
1960 ER=1: GOTO1330
1970 REM ** INSTRUCTIONS FOR MENU SETUP
1980 PRINT "THIS PROGRAM SETS UP A MENU
OF THE BASIC"
1990 PRINT "PROGRAMS ON A PEDISK II DIS
KETTE."
2000 PRINT "THE MENU LETS YOU LOAD AND
RUN PROGRAMS"
2010 PRINT "BY SELECTING FROM AN ALPHABE
TIZED LIST"
2020 PRINT "OF DESCRIPTIVE NAMES, EACH U
P TO 26"
2030 PRINT "CHARACTERS LONG."
2040 PRINT "THIS PROGRAM ACCEPTS YOUR D
ESCRIPTIVE"
2050 PRINT "NAMES, SORTS THEM, THEN REPL
ACES ITSELF"
2060 PRINT "IN MEMORY WITH THE MENU PROG
RAM."
2070 PRINT "ONCE THAT IS IN MEMORY, YOU
SAVE IT"
2080 PRINT "ON DISK, USING THE NAME 'M:0
'."
2090 PRINT "THEN WHEN YOU WANT TO USE T
HE MENU,"
2100 PRINT "JUST INSERT THE DISK AND ENT
ER:"

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2110 PRINTTAB(10)"■ !RUN"CHR$(34)"M:0"
CHR$(34)"■"
2120 PRINT"THE REST IS AUTOMATIC."
2130 PRINT"■ PRESS ANY KEY TO CON
TINUE...";
2140 GETA$:IFA$=""THEN2140
2150 PRINT"■ YOUR DESCRIPTIVE NAMES AND
FILE NAMES"
2160 PRINT"WILL BE IN AN ALPHABETIZED S
ERIES OF"
2170 PRINT"DATA STATEMENTS IN 'M:0'."
2180 PRINT"■ YOU CAN CHANGE THE MENU AT
ANY TIME,"
2190 PRINT"JUST BY CHANGING THE DATA ST
ATEMENTS"
2200 PRINT"AND !SAVING THE NEWLY-MODIFI
ED PROGRAM."
2210 PRINT"■ IF YOU CLOSE YOUR OTHER PRO
GRAMS WITH"
2220 PRINT"A '!RUN"CHR$(34)"M:0"CHR$(34
)"', RATHER THAN WITH 'END',"
2230 PRINT"THEY WILL AUTOMATICALLY RETU
RN YOU TO"
2240 PRINT"THE MENU WHEN THEY ARE FINIS
HED."
2250 PRINT"■ NOW PRESS 'RETURN' TO REVIE
W THESE"
2260 PRINT"INSTRUCTIONS, OR ANY OTHER K
EY TO"
2270 PRINT"BEGIN SETTING UP YOUR MENU .
."
2280 PRINTTAB(20)"■■■■ LOUIS F. SANDER"
2290 PRINTTAB(20)"MAY 30, 1982"
2300 GETA$:IFA$=""THEN2300
2310 IFA$=CHR$(13)THEN1980
2320 RETURN
READY

```

The following wish to be listed in the PEDISK Newsletter. Got a problem, write someone nearby. Got a solution, let everyone know (including us).

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We are pleased to see the list of software growing for PEDISK. We now have two word processors, two data base managers, mail lists, utilities, complete assembly language development tools, FORTH, KM3 PASCAL, communications software, menu drivers, and data transfer programs. Is there something you would especially like to see? Write and tell us. We are constantly in touch with major vendors. As you know, we convert much software ourselves.

Are you having any problems? It is important to make PEDISK the most reliable system available. If you have spotted any bugs, please write.

By for now.