Petdisk II	NEWSLETTER	

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There's lots of sood news this issue for PEDISK owners. Several new programs have become available. Several new related products are out and we have some programming tips for PDOS programmers.

NEW PRODUCTS

FLEXFILE II - a data base management program originally written by Michael Riley and distributed by AB Computers has been rewritten by Gary Tolton and optimized for PEDISK. Flexfile II includes the original MAIL LIST and REPORT WRITER features as well as the DATA BASE MANAGER. A Flexfile II user sets up his "file system" or data base by defining fields of data. Records are sorted by fields in each file. Commands will sort the files by field, find a specific record, and add, delete, or edit a file. Flexfile II is available directly from Microtech or from your dealer for \$60.00.

fullFORTH+ TARGET COMPILER - fullFORTH+ users may now set a tarset compiler. This is a program that compiles fullFORTH+ source into ROMable code that can be executed by any 6502 machine without the fullFORTH+ operating system. The fullFORTH+ Tarset Compiler is available from IDPCCo., Microtech or from your Microtech dealer at a cost of \$27.00.

COLOR VIDEO - a new color video board for Commodore PET; Rockwell AIM; and Synertek SYM has just been developed by CGRS Microtech; Inc, The Color Video Board Pluss into a ROM socket and appears as 4K of RAM. The board has many modes of graphics, semigraphics, and alphanumeric modes of operation. Based on the 6847 chip; the board displays 32 characters X 16 lines in the alphanumeric mode with eight colors. In the high resolution mode, a 128 X 192 dot display is provided. The new Color Video Board is available for \$139.95 directly from Microtech or your dealer.

PORTMAKER - Need two standard RS232 serial ports? Then set Portmaker! Two serial ports and a socket for a ROM allow Portmaker to plus into a ROM socket and still allow use of the ROM space. Two 6850 ACIAs appear as the hishest eight bytes of the ROM. Full RS232 bipolar buffering is also provided. Baud rate can be set from 4800 to 300 baud. Portmaker can be used with the new Terminal Communications software packase from Eastern House Software to provide a new level of communications capability. Portmaker is available from Microtech, Eastern House Software, 3239 Linda Dr., Winston-Salem, N.C. 27106. A complete packase including a single port PORTMAKER and the EHS software is available for \$99.95. The dual PORTMAKER costs \$69.95.

PAGE 2 PEDISX NEWSLETTER ISSUE 2 PEDISK NOTES:

The MAE Users Group software is now available on PEDISK! The PEDISK/MAE Users Group is being handled by Jim Oldfield, 635 Maple, Mt.Zion, Il. 62549.

Jim Shoffner, 1715 Demarietta, Apt. 2, San Jose, Ca. 95126 is using an 8" PEDISK and fullFORTH+. He reports that he is now exchanging diskettes with a ZBO FORTH system!

PROGRAMMING TIPS

Norman Fox, P.O.Box 7201, Murray, Utah 84107 has converted his CMC Word Processor to PEDISK. In doing so, he has written a routine that that compresses BASIC records prior to storage. These records cannot be retrieved in a relative format but use less space on disk. Since the word processor does not need relative records, this program is just what is needed. Norman will provide copies of this routine on PEDISK disk to those who send a S.A.S.E. and a 40 track PEDISK diskette. (80 track users write to MICROTECH) Here's Norman Fox's compress program with his comments:

```
11 POKE 59468,14:PRINT"":CLR
510 INPUT"TAPE, DISK (CBM), PDSKO, PDSK1 (T,D,O,1)";DV$
520 IFLEFT$(DV$,1)="T"THENDV=1
525 IFLEFT$ (DV$, 1) = "0"THENDV=10: PD$=":0"
527 IFLEFT$(DV$,1)="1"THENDV=10:PD$=":1"
1700 GOSUB1900: !OPENF$: T=-1: IFFC%=060T01720
1710 !CLOSEF$: !OPENF$NEWLEN
1720 G$=STR$(FL):GOSUB1950
1730 T=T+1:ONFL+2-TGOT01790:D$=T$(T)
1735 T1=LEN(D$):T2=LEN(G$):IFT1=20THEND$=" "+D$:GOT01735
1740 IFT1+T2>119THENU=120:GDT01755
1745 G$=G$+CHR$(T1)+D$:GOT01730
1755 IFT1+T2-U=20THENU=121
1760 G$=G$+CHR$(250)+D$:D$=MID$(G$,U+1):G$=LEFT$(G$,U):GOSUB1950:GOT01735
1790 G$=G$+CHR$(251):GOSUB1950:!CLOSEF$:GOT01000
1800 GOSUB1900: T=-1: IFFL<2GOT01820
1810 PRINT"APPEND (Y)?";
1811 GETIL$: IFIL$=""GOTO1811
1812 IFIL$="Y"THENT=FL
1820 !OPENF$: IFFC%=50G0T01980
1830 !INPUTF$6$:GOSUB1960:FL=VAL(G$)+T+1:N=0:D$=""
1840 !INPUTF$G$:U=1:GOSUB1960:IFN=OTHENN=1:GOTD1850
1845 IFLEFT$(T$(T),1)=" "THENT$(T)=MID$(T$(T),2)
1850 T=T+1:T1=ASC(MID$(G$,U,1))
1852 IF T1<250 GOTO 1870
1855 IFT1=250THEND$=MID$(G$,U+1):T=T-1:GOT01840
1860 IFT<>FL+1THENPRINT"ERROR OF REC NUMBER. WAS SHB"T;FL:STOP
1865 !CLOSEF$:GOT01000
1870 T$(T)=D$+MID$(G$,U+1,T1):D$="":U=U+1+T1:GOT01845
1900 F$=LEFT$(IL$,6)+PD$:RETURN
1950 !PRINTF$G$:G$=""
1960 IF FC%<>0 THEN PRINT"ERROR #" FC%:STOP
1970 RETURN
1980 PRINT"NO FILE BY THAT NAME": GOTO1020
11045 IFD>9G0T01700
11555 IFD>960T01800
```

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11 Just add the clr. Your system has a initial pointer problem. 510 Add new choices. 520 It's already there (keeping ya on your toes). 525-527 That's your default for this run. 11045 Ck and goto the save S/R. 11555 Ck and goto the load S/R. 1700 Stops error #4: open it: initialize counter: ck for error. 1710 Close: must be new file. 1720 Get number of records: out it. 1730 Start counting: ck for end: move data to working string. 1735 Length: length: check for delete chr (you don't know how long it took me to find this error) and add a SHIFTED space. 1740 How long is it?: out it if over 119. 1745 Add d\$ to g\$ with the length as an ASCII chr: get another. 1755 Ck for that del chr again. 1760 Add in EOR chr: put left overs in d\$: make g\$ 120 chr long: out it: stick left overs in next record (similar to lunch). 1790 No more fields to get so stick in anEOF chr and out it. 1800 Only six letters: initialize counter: anything to append to? 1810-1812 If appending, make counter equal to last field. 1820 Open it: is it there? 1830 Get number of fields (1st rec): ck for error: last field is: initialize vars. 1840 Input a record: set location at 1: ck for error: first record? 1845 Check for that shifted space and get rid of it. 1850 Count: find field length. 1852 Last field? 1855 Last field in this record: stay at same t\$():get next record. 1860 Assume (ass u me) EOF: check for correct amount of fields. SHE = should have been. 1865 Close up shop and go home. 1870 What I couldn't fit on 1852. Place partial(d\$) if any in t\$() then add in the correct portion of g\$: null d\$: set next location: go again. 1900 Set up file name string with a max of 6 letters. 1950 Out g\$ 1960 Check for error on out and inputs: stop if error If you want to keep going, just type 'cont'. 1970 Need I say? 1980 Try a new file name. If you have rev #5, add !list for a reminder.

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Anselm Wachtel, 159 Shenandoah Dr., Pittsburgh, Pa. 15235 has been experimenting with tape to disk transfer routines. This routine works although others do not. He wants to hear from PEDISK ow

```
10 OPEN1:I=0:DIMR$(60)

20 IFST=64THENCLOSE1:GOTO50

30 I=I+1:INPUT#1,R$(I)

40 GOTO20

50 FORJ=1TOI:PRINTR$(J);"|";:NEXT:REM P

ROOF THAT THE ARRAY EXISTS IN MEMORY

60 F$="ARTEST:0":I%=I:!OPENF$ NEW LEN I

%

70 FI%=1:FC%=0:FORJ=1TOI:!PRINTF$ R$(J)

80 IFFC%=0THENNEXTJ

90 IFFC%<>255ANDFC%<>0THENSY559904:PRIN

T"MERROR CODE #";FC%

100 !CLOSEF$ END:PRINT"MPROGRAM END OK"

;END
```

Jim Oldfield and John O'Hare, 41-132nd St., Lemont, Ill. 60439 have written a block map program for the PEDISK II. This program maps the contents of a PEDISK diskette and displays the results on the PET screen. It displays areas used and unused as well as all valuable information about the disk.

```
0 poke53,31:clr
1 ad=32512
2 pokead+145,1
3 pokead+146.0
4 pokead+147,1
5 pokead+150,8
6 poke183,0:poke184,32
7 fori=Oto4:reada$(i):next:data ".","#","#","Q","Z"
8 sys59910:poke59648,0
9 dim x%(16)
10 b=4096*2
20 print"
                 pdos block map"
25 print
30 print"disk name: ";:fori=btob+7:printchr$(peek(i));:next:print
40 print"number of active files: ";peek(b+8)
50 print"next open track:
                                  ";peek(b+9)
60 print"next open sector:
                                  ";peek(b+10)
70 rem fori=b+11tob+15:printchr$(peek(i));:next
80 rem fori=b+11tob+15:printpeek(i);:next
82 print
85 input "use graphics or numbers in map";a$
86 a$=left$(a$,1):ifa$<>"g"anda$<>"n"thenprint"":goto85
87 ifas="n"thennf=1
88 ifnfthenfori=Oto4:reada$(i):next
89 data ".","0","3","5","*"
90 b=b+16
92 ifnf=Othengosub900
95 print
```

```
100 dim a%(40,28)
110 fori=1to8:a%(0,i)=4:next
120 fori=btob+62*16step16
125 q=q+1
126 q$=mid$(str$(q),2):iflen(q$)=1thenq$=" "+q$
127 printq$" - ";
130 forj=0to15
140 x%(j+1)=peek(i+j):next
150 \times = \times \% (11)
155 ifx=255theni=99999:goto400
160 ifx%(6)=255then400
170 ifx=0thenv=1
180 ifx=3thenv=2
190 ifx=5thenv=3
195 forp=1to6:printchr$(x%(p));:next
200 a=x%(13):b=x%(14):c=x%(16)*256+x%(15)
210 d=0
220 a''_{(a,b)=v}
230 d=d+1
240 ifd=cthen400
250 b=b+1:ifb>28thenb=1:a=a+1
260 goto220
400 print""
410 next
450 print
455 print"hit return"
460 geta$:ifa$=""then460
480 s=0
500 print"
               sector - 111111111122222222
510 print"track 1234567890123456789012345678 free"
520 fori=sto40
525 f=28
530 b$=mid$(str$(i),2);iflen(b$)=1thenb$="0"+b$
540 print" "b$"
                  545 forj=1to28
550 printa$(a%(i,j));:f=f+(a%(i,j)<>0)
555 next
558 f$=mid$(str$(f),2):iflen(f$)=1thenf$="0"+f$
560 print"
           "f$
570 ifi=20thengosub800:goto500
580 tf=tf+f
590 next
600 print"blocks used="1148-tf"free="tf:gosub800:end
800 s=21:print"hit return to continue.";
810 poke158,0:wait158,1:poke158,0:return
900 print:print"following graphics are used:"
910 print
                   - free block"
920 printa$(0)"
930 printa$(1)"

    sequential file"

    basic program file"

940 printa$(2)"
950 printa$(3)"
                            load file"
                  - m.l.
960 printa$(4)" - block used by dos"
970 print
980 return
eady.
```

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Jim Oldfield and John O'Hare have also written a series of programs to provide a menu driven program selection function. These are: MENU - displays a selection menu and loads the selected program.

CREATE - creates a menu used by the MENU program.

MENADD - adds a new entry to the menu.

MENDES - describes all entries in the menu.

MENKIL - will delete an entry from the menu.

MENCOM - will compress a menu to free unused space.

This entire series of programs is available be sending \$10,00 to Microtech Users Newsletter, P.D.Box 102, Langhorne, Pa, 19047 The \$10.00 is used to purchase, copy, and mail the diskettes. Please state your PEDISK registration number.

PEDISK DEALERS

Two new dealers have been added to our list:

IDPCCo. (The fullFORTH+ people) Box 11594 Philadelphia, Pa. 19116

G.Tolton - Software Consultant P.O.Box 40 Willow Grove, Pa. 19090

Several new programs for PEDISK II were mentioned last issue including: KM3 Disk Operating System - the original DOS for PEDISK, and KM3 PASCAL. These are available from Wilserve Industries, Box 456, Bellmar, N.J. 08031. The address in our last issue was old.

WHAT'S NEXT

More major programs for PET are being converted to PEDISK. Shortly, the UNASSEMBLER will be converted. It creates MAE compatible source files from object code (ROMs,etc.).

We encourage user feedback. Got any problems? Got any solutions? Flease submit any items you wish to publish in the PEDISK USERS NEWSLETTER.

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The following people wish to be listed in this newsletter:

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NEW IBM COMPATIBLE 8" FLOPPY DISK for CBM/PET,* Aim, Sym



up to four times faster than any 488 bus-type mass storage device.

Remote PET/PEDISK computers can provide data entry for large machines.

8"

ating firmware.

PEDISK II is a high performance mass storage peripheral to enhance your computer's storage

disk drives. An important feature of the PEDISK II system is its ability to exchange data with

PDOS II software links directly to the standard BASIC and operates with BASIC-type commands for easy interfacing. A full set of disk utility commands completes the powerful disk oper-

other computers. The standard 8" IBM 3740 format allows data exchange with large computers.

Data files, mail lists, etc. available on large computers can be processed by the PET/PEDISK system.

capability. Total storage to 850K bytes is available. The PEDISK II system consists of a small disk

controller electronic board that mounts inside the computer and an external disk drive assembly.

pet**disk** II

LOW COST – HIGH PERFORMANCE FLOPPY DISK

5¼" MINI FLOPPY DISK SYSTEMS:

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Model 877-1 Single Drive, IBM standard (295K) \$1,095.00 Model 877-2 Dual Drive, IBM standard (590K) \$1,695.00

Payable in U.S. Dollars

DISK COMMANDS:

BASIC

- 11 OAD - reads a program file to the computer
 - stores a BASIC program file to the disk
 - forms a sequential or relative data file
 - reads a data record from a file on the disk

IRUN - reads a program file and executes

- M memory examine and change monitor.

FULL FEATURE "FORTH" FOR 6502 SYSTEMS

STRING HANDLING - variable length constants and variables are allowed. Processes compare, move, concatenate and sub-string words.

FLOATING POINT - process 5 or 9 digit integer and floating point numbers for arithmetic operations.

SCREEN EDITOR - contains a unique full cursor visible screen editor.

MICROTECH U.S.A.

INTERPRETER - can be executed directly in an interpretive mode

CROSS-COMPILER - words can be individually compiled and tested,

the entire program can also be cross-compiled for maximum efficiency. COND. ASSEMBLER - Machine language modules can be intermixed

FOR INFORMATION, SEE YOUR DEALER OR:

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PEDISK II offers the fastest mass storage system available for the Commodore PET. With a data transfer rate of 250000K bits per second, the PEDISK II loads data directly to memory. This is **ISAVE IOPEN** One, two, or three drives connect to the PEDISK controller board. The user can choose 5%" or



- **IPRINT** - stores a data record to a file on the disk
- ICLOSE ends a sequential or relative data file
- ILIST - displays a directory of all files on the disk

MONITOR-DOS

- D displays contents of memory or diskette.
- G go to program and execute.
- help user with listing of all commands. н
- kill a file on the diskette (erase file). к
- L read program to the computer memory.
- N name a file differently (rename).
 - P print directory of all files on the disk.
 - R return to BASIC mode.
 - save program or data from memory to the disk. S
 - U - utility: format, copy, compress, patch diskette.
 - X execute program after loading.

DEALER INQUIRIES INVITED

full FORTH +

and conditionally assembled to fullFORTH.

to speed testing and debugging.